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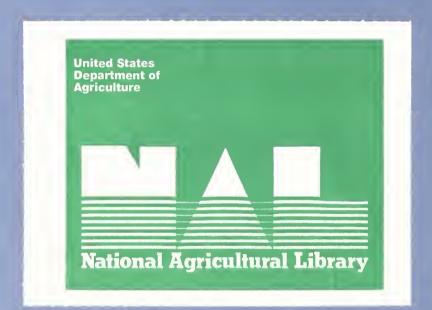
Piant Protection and Quarantine



Checklist of the Armored Scales (Homoptera: Diaspididae) of the Conterminous United States

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Introduction

There are approximately 1,700 species of armored scales (Diaspididae) in the world (Beardsley and Gonzalez (1975: 47) and 285 species in the conterminous United States. Although 297 species are treated in this list, 12 species are regarded as eradicated. These 12 species are known only from the original collections and have not been collected during the past 40 years, or are recorded only from localized infestations that have been subjected to eradication measures. Aonidiella inornata McKenzie was recorded from Houston, Texas (McDaniel 1968:212), and Quadraspidiotus braunschvigi (Rungs) (Ferris 1942:426) is known only from the original collection. Although treated as eradicated, both species may still exist as localized infestations.

Melanaspis multiclavata (Green and Laing) recorded from Florida by Ferris (1941:429) is a misidentification of an undescribed species (Davidson 1978, per. comm.) and is excluded from this paper. Also excluded is <u>Parlatoria ziziphi</u> (Lucas) (= <u>P. zizyphus</u>) reported from Mississippi (Ferris 1937:90) on the basis of one old record from lemons and oranges of questionable origin.

Abgrallaspis comstocki (Johnson) and A. howardi (Cockerell) possibly are forms of Diaspidiotus ancylus (Putnam) (Stannard 1965:573), but are listed as separate species because of taxonomical problems with D. ancylus and related species. Although A. townsendi (Cockerell) is considered a synonym of A. howardi by various workers, it is treated here as a separate species. Diaspidiotus piceus (Sanders) was treated as a junior synonym of D. hunteri (Newell) by Ferris (1938:182), which in turn is a junior synonym of Quadraspidiotus ostreaeformis (Curtis). Although treated here as a separate species, D. piceus may be a form of D. ancylus.

The information for each species consists of an abbreviated synonymy, world distribution, and an abbreviated list of host-plants. Some of the names used here differ

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from those currently used by other coccidologists; in these cases, the other names are included in the synonymy. For a detailed synonymy, refer to Borchsenius (1966). In the distribution, the States are abbreviated as given in the index. East and West Germany are treated as Germany. The island of Taiwan and mainland China are treated separately. Hawaii is placed in "Other Areas" because it is not a conterminous State. The foreign countries are grouped under the following headings: NEW WORLD (North and South America, Caribbean Islands, Bermuda); EUROPE (includes Azores, excludes European USSR); USSR; AFRICA (includes outlying islands in the Atlantic and Indian Oceans); ASIA (eastern shore of Mediterranean Sea to Far East); OTHER AREAS (Australia, New Guinea, Pacific Islands). The host plants include those reported from foreign countries. Most of the species infest many host plants and are indicated as polyphagous. However, if the species is commonly found on certain hosts, or known only from a few hosts, the names of the host plants are given.

The users of this list should be cognizant that many of the distribution records were obtained from the literature and agricultural quarantine interception records, and are unverified. Additional information was obtained from the slide material and card files in the Coccoidea Collection of the U. S. National Museum of Natural History, records in the Cooperative Economic Insect Report and Cooperative Plant Pest Report, U. S. Dept. of Agriculture, and various coccidologists. Unfortunately, up-to-date information of the insect fauna of many states and foreign countries is unavailable and distribution for many species is incomplete.

An asterisk after a State denotes old record(s) of 40 or more years. In some cases, the species may no longer exist in the State, especially for tropical species in northern greenhouses. Two asterisks after a species mean that the species apparently does not exist now in the United States. A plus sign after a country means that the distribution record is based on one or two quarantine interceptions and that no report from that country was found in the literature. Therefore, the record requires confirmation. Greenhouse means that the species was found on house plants or plants grown in hot houses.

Reference citations are presented only in the introduction, and only the major sources of information are included in the references. Although much information was obtained from the "List of Intercepted Plant Pests",

Cooperative Economic Insect Report and Cooperative Plant Pest Report, these sources are not included in the references.

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colorata
 (Cockerell)

Aspidiotus uvae var. coloratus Cockerell; Aspidiotus coloratus Cockerell; Hemiberlesia colorata (Cockerell)

DISTRIBUTION: NM, TX

HOSTS:

Chilopsis linearis

comstocki
(Johnson)

Aspidiotus comstocki Johnson; Aspidiella comstocki (Johnson); Hemiberlesia comstocki (Johnson); Gonaspidiotus comstocki (Johnson)

DISTRIBUTION:

DC, FL, GA, IL, IN, KY, MO, MS, NC, OH, PA, SC, TN, TX, VA, WV

HOSTS:

Acer, A. saccharinum, A. saccharum

cyanophylli
(Signoret)

Aspidiotus cyanophylli Signoret; Furcaspis cyanophylli (Signoret); Hemiberlesia cyanophylli (Signoret)

DISTRIBUTION:

General distribution in U. S. Widespread throughout the tropical and subtropical areas of the world. Greenhouse in temperate areas

HOSTS:

Polyphagous

degenerata (Leonardi) Chrysomphalus degeneratus Leonardi; Aspidiotus degeneratus (Leonardi); Hemiberlesia degenerata (Leonardi); Dynaspidiotus degeneratus (Leonardi)

DISTRIBUTION:

CA, MO, OR

Europe:

Greece, Italy, Portugal

Asia:

China, Japan, Korea

HOSTS: Aralia, Camellia, Citrus, Eurya, Ilex, Osmanthus, Thea

fraxini (McKenzie)

Hemiberlesia fraxini McKenzie

DISTRIBUTION:

AZ, CA New World: Mexico

HOSTS: Fraxinus

howardi (Cockerell)

Aspidiotus howardi Cockerell; Aspidiotus epigaeae Marlatt; Aspidiotus pseudospinosus Woglum; Hemiberlesia howardi (Cockerell); Gonaspidiotus howardi (Cockerell)

DISTRIBUTION:

AL, AZ, CA, CO, CT, DC, DE, FL, GA, IA, IL, LA, MA, MD, MO, MS, NC, NJ, NY, OK, PA, RI, SC, TN, TX, VA, WV

New World: Mexico

HOSTS: Polyphagous

ithaeae (Ferris)

Aspidiotus ithacae Ferris; Gonaspidiotus ithacae (Ferris)

DISTRIBUTION:

CT, GA, IN, MD, NY, OH, PA, TN, VA, WV

HOSTS:

Abies, Pseudotsuga, Tsuga

oxycoccus (Woglum)

Aspidiotus oxycoccus Woglum; Aspidiella oxycoccus (Woglum); Aspidaspis oxycoccus (Woglum); Gonaspidiotus oxycoccus (Woglum)

DISTRIBUTION: MA, NJ, OR, WA

HOSTS:

Rhododendron, Vaccinium, V. oxycoccus

quercicola (Ferris)

Hemiberlesia quercicola Ferris

DISTRIBUTION:

CA, MM

HOSTS: Quercus

townsendi (Cockerell) Aspidiotus townsendi Cockerell

DISTRIBUTION:

AL, AR, DC, FL, GA, LA, MA, MD, MO, MS, OH, PA, TN, TX,

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New World:

Mexico

HOSTS:

Polyphagous

ACUTASPIS

agavis
(Townsend &
Cockerell)

Aspidiotus agavis Townsend & Cockerell; Chrysomphalus

agavis (Townsend & Cockerell)

DISTRIBUTION:

AZ, TX. Greenhouse in DC*

New World:

Costa Rica, Mexico, Trinidad, Venezuela

HOSTS:

Agave, Yucca

albopicta (Cockerell)

Aspidiotus albopictus Cockerell; Chrysomphalus albopictus (Cockerell); Aspidiotus albopictus var. leonis Townsend & Cockerell; Aspidiotus koebelei Townsend & Cockerell; Chrysomphalus

koebelei (Townsend & Cockerell)

DISTRIBUTION:

TX, (CA eradicated)

New World:

Costa Rica, Ecuador, Guatemala, Honduras, Mexico, Panama

HOSTS:

Polyphagous

morrisonorum Kosztarab DISTRIBUTION:

AL, FL, GA, LA, MA, MI, NC, OH, OK, PA, TN, VA

New World:

Bermuda, Canada (Quebec)

HOSTS:

Abies, Chamaecyparis, Cupressus, Juniperus, Picea, Pinus,

Thuja, Torreya, Tsuga

perseae
 (Comstock)

<u>Aspidiotus perseae</u> Comstock; <u>Chrysomphalus perseae</u> (Comstock)

DISTRIBUTION:

AL, DC, FL, GA, LA, MO, MS, OK, SC, TN, TX: greenhouse in

W*

New World:

Brazil, Central America, Colombia, Cuba, Trinidad,

Venezuela Europe:

Greenhouse in England, Germany

USSR:

Kiev in greenhouse

HOSTS:

Polyphagous

scutiformis
(Cockerell)

Aspidiotus scutiformis Cockerell; Chrysomphalus scutiformis (Cockerell)

DISTRIBUTION:

ΤX

New World:

Argentina, Aruba, Brazil, Colombia, Guatemala, Mexico

HOSTS:

Polyphagous Polyphagous

ANCEPASPIS

edentata (Ferris) Protodiaspis edentata Ferris

DISTRIBUTION:

ΑZ

HOSTS:

Acacia gregii

tridentata (Ferris)

Protodiaspis tridentata Ferris

DISTRIBUTION: AZ, TX.

New World: Mexico

HOSTS:

Prosopis glandulosa, P. velutina

ANDASPIS

hawaiiensis (Maskell)

Mytilaspis flava var. hawaiiensis Maskell; Lepidosaphes hawaiiensis (Maskell); Lepidosaphes moorsi Doane & Ferris

DISTRIBUTION:

FL, greenhouse in DC*, MD*

New World:

Barbados, Cuba, Jamaica

Africa:

Algeria, South Africa

Asia:

China, Philippines, Sri Lanka, Taiwan

Other Areas:

Bonin Is., Hawaii, Samoa

Hosts: Polyphagous

mackieana (McKenzie) Lepidosaphes mackieana McKenzie

DISTRIBUTION:

CA, FL; greenhouse in DC, NJ

Other Areas:

Hawaii

HOSTS:

ANNULASPIS

HUSIS:

Dendrobium, orchid

Dom. Reb. citims op.

polygona Ferris

DISTRIBUTION:

HOSTS:

perennial grass

AONIDIA

atlantica Ferris Cupressaspis atlantica (Ferris)

DISTRIBUTION:

FL, GA

HOSTS:

Chamaecyparis thyoides, Juniperus

lauri (Bouche)** Aspidiotus lauri Bouche

DISTRIBUTION:

DC*, MS*, NY*; (CA eradicated)

Africa:

Canary Is., Cape Verde, Madeira Is., North Africa

Europe:

Azores, southern Europe, greenhouse in central and north-

ern countries

Asia: Near East USSR:

Greenhouse

HOSTS:

Laurus nobilis

shastae (Coleman)

Aspidiotus coniferarum var. shastae Coleman; Crytaspidiotus shastae (Coleman); Cupressaspis shastae (Coleman)

DISTRIBUTION:

AZ, CA, KS, MO, NJ, OK, TX, UT

HOSTS:

Cupressus, Libocedrus, Juniperus, Sequoia

AONIDIELLA

<u>Aspidiotus</u> <u>aurantii</u> <u>Maskell; <u>Chrysomphalus</u> <u>aurantii</u></u>

aurantii
(Maskell)

DISTRIBUTION:

AL, CA, FL, GA, TX; greenhouse in DC*, KS, NJ, MO*, PA,

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New World:

Antigua, Bahamas, Barbados, Bermuda, Dominica, Donimican Republic, Guadeloupe, Guyana, Jamaica, Mexico, Nicaragua, Martinique, Montserrat, Panama, St. Lucia, St. Vincent, Trinidad, South America

Europe:

Countries in Mediterranean area

Africa:

North Africa, Angola, Canary Is., Congo, Ethiopia, Guinea, Kenya, Madagascar, Madeira Is., Malawi, Mauritius,

Mozambique, Reunion, Rhodesia, Senegal, Seychelles, Sudan, South Africa, Tanzania, Togo, Uganda, Zambia

USSR:

Black Sea Coast, Transcaucasia

Asia:

Widely distributed

Other Areas:

Australia, Fiji, Guam, New Britian, New Caledonia, New Zealand, Russell Is., Samoa, Society Is., Solomon Is., Tonga, Wallis Is.

HOSTS:

Citrus and other hosts

citrina (Coquillett)

Aspidiotus citrinus Coquillett; Aspidiotus aurantii varecitrinus Coquillett; Aonidiella aurantii citrina (Coquillett); Chrysomphalus aurantii citrinus (Coquillett); Chrysomphalus citrinus (Coquillett)

DISTRIBUTION:

CA, FL, TX

New World:

Chile, Jamaica, Mexico, Nicaragua.

Africa:

Guinea, South Africa, Zaire

USSR:

Armenia, Azerbaijan, Crimea, Georgia, Krasnodar region

ASIA:

Afghanistan, Bangladesh, China, India, Indonesia, Iran, Japan, Malaysia, Korea, Nepal, Pakistan, Okinawa, Philippines, Southern Yemen, Taiwan, Thailand, Turkey

Other Areas:

Australia, Bonin Is., Fiji, New Guinea, Western Samoa

HOSTS:

<u>Citrus</u> and other hosts

inornata McKenzie**

DISTRIBUTION:
TX (1 record)
New World:
Ecuador+, Dominican Republic+, Puerto Rico

Asia:

China, Hong Kong, India, Indonesia, Japan, Laos, Okinawa,

Philippines, Taiwan, Thailand

Other Areas:

Australia, Guam, Hawaii, Kusaie, Marshall Is., Palau Is.,

Ponape, New Guinea, Truk, Wake Is., Yap Is.

HOSTS:

Polyphagous - often on <u>Citrus</u>, <u>Mangifera indica</u>, <u>Cocos</u>

nucifera

orientalis (Newstead)

Aspidiotus orientalis Newstead; Aspidiotus (Aonidiella) cocotiphagus Maskell; Chrysomphalus orientalis (Newstead); Aonidiella cocotiphagus (Maskell)

DISTRIBUTION:

FL

New World:

Bahamas, Brazil, Caribbean Islands, Colombia, Mexico,

Panama, Venezuela

Africa:

Ethiopia, Kenya, Madagascar, Mauritius, Somalia, South

Africa, Sudan, Tanzania

Asia:

Afghanistan, Burma, Cambodia, China, Hong Kong, India, Indonesia, Iran, Iraq, Laos, Malaysia, Nepal, Nicobar Is., Pakistan, Philippines, Saudi Arabia, Singapore, Sri Lanka,

Thailand, Vietnam

Other Areas:

Australia, Mariana Is., Yap. Is.

HOSTS:

Polyphagous - often on cycads, Mangifera indica, palms

<u>taxus</u> <u>Leonardi</u>

Chrysomphalus taxus (Leonardi)

DISTRIBUTION:

AL, FL, LA, MD; (CA eradicated)

New World:

Argentina, Brazil

Europe:

Italy

USSR:

Black Sea coast of Western Georgia, Crimea

Asia:

Japan

HOSTS:

Cephalotaxus, Podocarpus, Taxus

AONIDOMYTILUS

albus (Cockerell) Mytilaspis albus Cockerell; <u>Lepidosaphes alba</u> (Cockerell); <u>Coccomytilus dispar</u> (Vayssiere); <u>Lepidosaphes dispar</u> (Vayssiere)

DISTRIBUTION:

FL

New World:

Argentina, Bahamas, Brazil, Caribbean Islands, Colombia,

Honduras, Mexico, Peru, Surinam

Africa:

Angola, Gambia, Ghana, Ivory Coast, Kenya, Liberia, Madagascar, Malawi, Mauritius, Mozambique, Nigeria,

Senegal, Tanzania, Uganda, Zaire

Asia:

India, Indonesia, Sri Lanka, Taiwan

HOSTS:

Often on Manihot esculenta; Carica papaya, Malvastrum,

Malvaceae, other hosts.

bilobis Ferris <u>Dactylaspis</u> <u>biloba</u> (Ferris)

DISTRIBUTION:

CA

HOSTS:

Allenrolfea, Atriplex

(Ferris)

Lepidosaphes ceanothi Ferris; Chionaspis ceanothi (Ferris)

DISTRIBUTION:

CA

HOSTS:

Ceanothus

(Cockerell)

Mytilaspis albus var. concolor Cockerell; Lepidosaphes concolor (Cockerell); Chionaspis concolor (Cockerell)

DISTRIBUTION:

AZ, CA, CO, NM, TX

New World: Mexico

HOSTS:

Atriplex, Borrichia frutescens, Encelia farinosa,

Franseria, Haplopappus laricifolius, Isomeris, Pedilanthus

macrocarpus, Quercus, Prosopis, Suaeda

durus Ferris Dactylaspis dura (Ferris)

DISTIBUTION:

CA

HOSTS:

Lycium cooperi

hyperici Ferris DISTRIBUTION:

AL, DC, GA, FL, MS, NC, VA

HOSTS:

Ascyrum hypericoides, Hypericum glomeratum

incisus Ferris

DISTRIBUTION:

AZ, TX

HOSTS:

Atriplex, Eurotia lanatum

multiglandulatus Kosztarab DISTRIBUTION:

FL, GA, IL, IN, MD, MO, OH, VA

HOSTS: Hypericum

peninsularis (Ferris) Lepidosaphes peninsularis Ferris

DISTRIBUTION:

ΤX

New World: Mexico **HOSTS:**

Asclepias subulata, Euphorbia antisyphilitica, Porophyllum

gracile

sabatius Tippins

DISTRIBUTION:

AL.

HOSTS:

Polygala cymosa, Sabatia

solidaginis (Hoke)

Lepidosaphes solidaginis Hoke

DISTRIBUTION:

AL, FL, GA, MD, MS, OK, SC, TN, VA

New World:

Cuba

HOSTS:

Baccharis halimifolia, Borrichia frutescens, Eupatorium,

Iva imbricata

variabilis Ferris

DISTRIBUTION:

CA

HOSTS:

Catalpa, Encelia, Haplopappus, Sambucus

ASPIDASPIS

arctostaphyli (Cockerell & Robbins)

Aspidiotus arctostaphyli Cockerell & Robbins; Aspidiella arctostaphyli (Cockerell & Robbins)

DISTRIBUTION:

CA, OR

HOSTS:

Arbutus menziesii, Arctostaphylos, laurel, Umbrellularia

californica

densiflorae (Bremner)

Aspidiotus densiflorae Bremner; Aspidiella densiflorae

(Bremner)

DISTRIBUITON:

CA

New World:

Mexico (Guadeloupe Is.)

HOSTS:

Pasania densiflora, Quercus

florenciae (Coleman)

Aspidiotus florenciae Coleman

DISTRIBUTION:

AZ, CA

HOSTS:

Pinus pinderosa

gainesi McDaniel DISTRIBUTION:

ΤX

HOSTS:

Antirrhinum

ASPIDIELLA

sacchari (Cockerell) Aspidiotus sacchari Cockerell

DISTRIBUTION:

FL, TX

New World:

Bahamas, most Caribbean Islands, Central America,

Colombia, Guyana, Mexico

Africa:

Liberia, Madagascar, Mauritius, Nigeria, Reunion,

Rodrigues, Sierra Leone.

Asia:

Indonesia (Java), Laos, Malaysia, Pakistan, Sri Lanka

Other Areas:

Fiji, Guam, Kwajalein, New Guinea, Palau Is., Saipan,

Tahiti+, Tinian

HOSTS:

Canna, Cocos nucifera, Coix lacryma-jobi, Costus,

Saccharum officinarum, various grasses.

ASPIDIOTUS

<u>cryptomeriae</u> Kuwana DISTRIBUTION:

CT, DE, IN, MD, NY, PA

USSR: Far east

Asia:

China, Japan, Korea, Taiwan

HOSTS:

Abies, Cedrus, Cephalotaxus, Chamaecyparis, Cryptomeria, Keteleeria, Picea, Pinus, Pseudotsuga, Taxus, Torreya

destructor Signoret Aspidiotus transparens Green; Aspidiotus translucens Cockerell & Robinson; Temnaspidiotus destructor (Signoret)

DISTRIBUTION:

FL, GA; greenhouse in CT, PA; (CA eradicated)

New World:

Widespread except no report from Argentina, Canada, Chile,

Paraguay and Uruguay

Europe:

Germany (greenhouse)

Africa:

Reported from many countries south of Sahara Desert on continent, Canary Is., Cape Verde, Madagascar, Madeira Is., Mauritius, Reunion, Seychelles; no record from North

Africa except Egypt

USSR:

Azerbaijan, Georgia

Asia:

Iran eastward to Indonesia, north into Japan and Korea

Other Areas:

Australia, Bonin Is., Caroline Is., Fiji, Hawaii, Mariana Is., Marshall Is., New Britain, New Caledonia, New Guinea, New Hebrides, Samoa, Society Is., Solomon Is., Tuamotu

Is., Wallis Is.

HOSTS:

Polyphagous

Green

Temnaspidiotus excisus (Green)

DISTRIBUTION:

FL

New World:

Antiqua, Colombia, Costa Rica, Dominican Republic,

Ecuador, El Salvador, Grenada, Guatemala, Guyana, Honduras, Jamaica, Martinique, Mexico, Panama, Puerto Rico, St. Croix, Surinam, Trinidad, Venezuela Asia:
China, India, Indonesia, Japan, Pakistan, Philippines, Singapore, Sri Lanka, Taiwan, Thailand Other Areas:
Fiji, New Guinea, Palau Is., Saipan, Tinian, Yap Is.

HOSTS:

Polyphagous; often on Aglaonema and Citrus

Tippins & Beshear

DISTRIBUTION: AL, FL, GA

HOSTS:

Cladium, Mariscus jamaicensis

nerii Bouche <u>Chermes nerii</u> Bouche; <u>Aspidiotus hederae</u> (Vallot); <u>Aspidiotus vagabundus Cockerell</u>

DISTRIBUTION:

General distribution in United States ; greenhouse in colder states

New World:

Antigua, Argentina, Bermuda, Bolivia, Brazil, Canada, Chile, Colombia, Costa Rica, Cuba, Ecuador, Dominican Republic, Grenada, Guatemala, Guadeloupe, Haiti, Jamaica, Mexico, Panama, Peru, Puerto Rico, Uruguay

Europe:

Widespread; Azores

USSR:

Armenia, Azerbaijan, Crimea, Krasnodar; greenhouse

Africa:

North Africa, Canary Is., Ethiopia, Kenya, Madagascar, Madeira Is., Malawi, Mozambique, Nigeria, Rhodesia, South Africa, S.W. Africa, Tanzania, Uganda, Zaire

Asia:

China, Cyprus, Iran, Israel, Jordan, Korea, Lebanon,

Japan, Saudi Arabia, Syria, Turkey

Other Areas:

Australia, Hawaii, New Caledonia, New Zealand

HOSTS:

Polyphagous

spinosus Comstock

Aspidiotus persearum Cockerell

DISTRIBUTION:

AL, CA, FL, GA, LA, MS, TX; greenhouse in DC*, NY, VA

New World:

Bahamas, Bermuda, Brazil, Central America, Colombia, Cuba, Dominican Republic, Mexico, Peru, Puerto Rico, Uruguay

Europe:

Azores, Italy, Spain, greenhouse in England, Germany

USSR:

Georgia; greenhouse in Leningrad

Africa:

Algeria, Canary Is., Madagascar, Madeira Is., Mozambique,

South Africa, Tanzania

Asia:

China, Israel, Japan, Syria, Turkey

Other Areas: Hawaii, Yap Is.

HOSTS:

Polyphagous

AULACASPIS

rosae (Bouche)

Aspidiotus rosae Bouche

DISTRIBUTION:

General distribution in conterminous U.S.

New World:

Argentina, Brazil, Canada, Chile, Colombia, Costa Rica, Dominican Republic, Guatemala, El Salvador, Jamaica, Peru,

Dominican Republic, Guatemala, El Salvador, Jamaica, Peru, Puerto Rico, Venezuela

Europe:

Europe:

Many countries; Azores

USSR

Africa:

North Africa, Canary Is., Cape Verde, Madeira Is., South

Africa, Tanzania, Zaire

Asia:

China, India, Iran, Iraq, Israel, Japan, Korea,

Phillippines, Taiwan, Turkey

Other Areas:

Australia, Bonin Is., New Caledonia, New Zealand

HOSTS:

Rosa, Rubus, other Rosaceae.

CARULASPIS

juniperi (Bouche)

Aspidiotus juniperi Bouche; Diaspis carueli (Targioni-Tozzetti), Carulaspis carueli (Targioni-Tozzetti), Diaspis visci (Schrank), Carulaspis visci (Schrank) (misidentifications)

DISTRIBUTION:

AR, CA, CT, DC, DE, FL, GA, IN, ID, KS, KY, MA, MI, MD, MO, NC, NJ, NY, OH, OK, OR, PA, RI, SC, TN, TX, UT, VA, WA New World:

Argentina, Brazil, Canada, Chile

Europe:

Many countries; Azores

USSR:

Crimea, north Caucasus, Turkmen SSR, Uzbek SSR

Africa:

Algeria, Canary Is., Egypt?, Madeira Is., Morocco

Asia:

Iran, Turkey

Other Areas:

Australia, New Zealand

HOSTS:

Biota, Callistris, Chamaecyparis, Cryptomeria Cupressocyparis, Cupressus, Juniperus, Libocedrus, Sequoia, Taxodium, Thuja

minima (Targioni-Tozzetti)

<u>Diaspis minima</u> Targioni-Tozzetti; <u>Carulaspis carueli</u> (Targioni-Tozzetti)

DISTRIBUTION:

CA, FL, GA, KS, LA, MO, NC, NM, OK, PA, TN, TX, UT, VA, WA New World:

Argentina, Bermuda, Chile, Colombia, Cuba, Mexico, Uruguay Europe:

Azores, Austria, England, France, Greece, Italy, Portugal, Romania, Spain, Sweden

USSR:

Armenia, Crimea, Krasnodar Territory, Transcaucasus,

Ukraine

Africa:

Algeria, Ethiopia, Guinea, Madeira Is., Morocco, South

Africa

Asia:

Iran, Israel, Jordan

Other Areas:

Hawaii

HOSTS:
Callistris, Chaemacyparis, Cryptomeria, Cupressus,
Juniperus, Sequoia, Thuja

CHIONASPIS

acericola Hollinger DISTRIBUTION: MD, MO, OH, PA, TX

HOSTS:

Acer, A. saccharinum, A. saccharum

americana Johnson Fundaspis americana (Johnson)

DISTRIBUTION:

AL, CA, CO, CT, DC, DE, FL, GA, IA, IL, IN, KS, LA, MA, MD, MO, MI, MN, MS, NC, NE, NJ, OH, OK, PA, SC, SD, RI, TN, TX, VA, WI, WV

HOSTS:

Polyphagous - often found in <u>Ulmus</u>

caryae Cooley DISTRIBUTION:

CT, DC, FL, IA, IN, KS, MO, NC, OH, PA

HOSTS:

Carya, Juglans nigra

corni Cooley DISTRIBUTION:

CA, ID, IL, KS, LA, MA, MD, MI, MS, NJ, NY, OH, PA, UT, WI

New World:

Canada (Ontario)

HOSTS: Cornus

<u>etrusca</u> <u>Leonardi</u> DISTRIBUTION:

AZ, CA, TX New World: Mexico

Europe:

France, Italy, Spain

Africa:

Algeria, Canary Is., Egypt, Mauritania, Morocco, Tunisia

Asia: Turkey

HOSTS: Tamarix

floridensis Takagi

DISTRIBUTION:

FL

HOSTS: Fraxinus

furfura (Fitch) Aspidiotus furfurus Fitch

DISTRIBUTION:

General distribution in conterminous U.S.

New World: Canada

HOSTS:

Crataegus, Cydonia, Malus, Prunus, Pyracantha, Sorbus,

other Rosaceae

gleditsiae Sanders Phenacaspis spinicola Dietz & Morrison

DISTRIBUTION:

FL, IL, IN, KS, LA, ME, MD, MO, MS, OH, PA, TN, TX;

(CA eradicated)

HOSTS:

Gleditsia triacanthos

heterophyllae Cooley Chionaspis pinifoliae heterophyllae Cooley; Phenacaspis

heterophyllae (Cooley)

DISTRIBUTION:

AL, CT, DC, DE, FL, GA, LA, MA, MD, MO, MS, NC, NJ, NY,

OH, PA, RI, SC, TN, TX, VA

New World:

Bahamas, Mexico

HOSTS: Pinus kosztarabi Takagi DISTRIBUTION:

GA, MD, NC, OH, PA, SC, TN, VA

HOSTS:

Fraxinus, Ostrya virginiana

lintneri Comstock Chionaspis lintneri betulae Cooley

DISTRIBUTION:

CT, DC, FL, IA, MA, ME, MI, NH, NY, OH, PA, TX, VT

New World:

Canada (Ontario, Quebec, Prince Edward Is.)

HOSTS:

Alnus, Amelanchier, Betula, Cornus, Corylus, Juglans,

Viburnum

longiloba Cooley DISTRIBUTION:

AR, FL, IA, KS, LA, MI, MO, MS, NE, OH, TX

New World:

Mexico

HOSTS:

Populus, Salix

nyssae Comstock Phenacaspis nyssae (Comstock); Chionaspis sylvatica

Sanders; <u>Fundaspis</u> <u>sylvatica</u> (Sanders)

DISTRIBUTION:

AL, AR, DC, CT, FL, GA, IN, MD, MO, NC, NJ, NY, OH, PA,

SC, TN, TX, VA, WV

HOSTS:

Celtis occidentalis, Lindera benzoin, Nyssa sylvatica,

Quercus, Symplocos tinctoria

ortholobis Comstock

DISTRIBUTION:

CA, ID, MT, NV, OR, WA

New World:

Canada (British Columbia)

HOSTS:

Alnus, Ceanothus, Rhamnus purshiana

parkii Hollinger Chionaspis platani Cooley; Phenacaspis platani (Cooley); Phenacaspis occidentalis Kosztarab

DISTRIBUTION:

IN, KS, LA, MO, OH, TX, VA

HOSTS: Platanus

pinifoliae (Fitch)

Aspidiotus pinifoliae Fitch; Phenacaspis pinifoliae (Fitch)

DISTRIBUTION:

General distribution in conterminous U.S.

New World:

Canada, Cuba, El Salvador, Honduras, Mexico

Europe: England

HOSTS:

Abies, Picea, Pinus, Pseudotsuga, Tsuga

salicisnigrae (Walsh)

Aspidiotus salicis-nigrae Walsh

DISTRIBUTION:

AL, AR, CA, CO, FL, IA, ID, IL, IN, KS, LA, MA, MI, MN, MO, MS, MT, NC, ND, NE, NJ, NM, NY, OH, OK, PA, SD, TN,

TX, WI, WY

New World:

Canada

Asia:

Japan

Amelanchier, Cornus, Fraxinus, Liriodendron, Populus,

Salix

sassceri Cockerell & Robbins

DISTRIBUTION:

CA, CO

HOSTS:

Ceanothus

triformis Tippins & Beshear Chionaspis betulae Tippins & Beshear

DISTRIBUTION:

FL, GA

HOSTS: Betula

wistariae Cooley Phenacaspis fugicola Kuwana

DISTRIBUTION:

CA (1 localized infestation), PA

Asià: Japan

HOSTS: Wistaria

CHORTINASPIS

consolidata Ferris

DISTRIBUTION:

AZ, CA

HOSTS:

Hilaria rigida

cottami McDaniel DISTRIBUTION:

TX

HOSTS:

Stenotaphrum secundatum

divaricata Ferris DISTRIBUTION:

FL, GA

HOSTS:

Aristida, Eleusine indica

frankliniana Ferris DISTRIBUTION:

ΤX

HOSTS:

Hilaria cenchroides

graminella (Cockerell)

Aspidiotus graminellus Cockerell; <u>Targionia graminella</u> (Cockerell)

DISTRIBUTION:

AZ, CO, FL, GA, NM, TX

HOSTS:

Bouteloua, Monanthochloe, Poaceae

subchortina
(Laing)

Aspidiotus subchortinus Laing

DISTRIBUTION:

AZ, FL, MS, TX

New World:

Bahamas, Colombia, Jamaica, Mexico, Panama, Peru

Other Areas:

Hawaii

HOSTS:

Andropogon, bromeliad, Eremochloa ophiuroides, Musa paradisiaca sapietum, Panicum, Saccharum officinarum,

Stenotaphrum secundatum, grasses

CHRYSOMPHALUS

aonidum (Linnaeus)

Coccus aonidum Linnaeus; Chrysomphalus ficus Ashmead; Aspidiotus ficus (Ashmead)

DISTRIBUTION:

Most States; greenhouse in colder areas. Widespread in transical and subtransical areas of the unrild

in tropical and subtropical areas of the world

HOSTS:

Polyphagous Polyphagous

bifasciculatus Ferris DISTRIBUTION:

AL, CA, DE, GA, LA, MD, NC, NJ, OK, SC, TX, VA

New World:

Mexico Asia:

China, Japan, Korea, Taiwan

USSR:

Greenhouse

Other Areas:

Hawaii

HOSTS: Polyphagous

dictyospermi (Morgan)

Aspidiotus dictyospermi Morgan

DISTRIBUTION:

AL, AZ, CA, CO*, CT*, DC*, FL, GA, IL*, IN*, KS*, LA, MA, MD, MI, MN*, MO*, MS, NC*, NH*, NJ, NM*, NY*, OH, PA, RI*, SC, TN*, TX, UT, VA, WV*. Widespread throughout the tropical and subtropical areas of the world; greenhouse in temperate areas

HOSTS:

Pol yphagous

CIRCULASPIS

bibursa Ferris DISTRIBUTION:

TΧ

HOSTS:

Triodia pilosa

fistulata (Ferris)

Odonaspis fistulata Ferris

DISTRIBUTION:

ΤX

New World: Mexico

HOSTS:

Distichilis spicata, Sporobolus

CLAVASPIS

barbigera Ferris

DISTRIBUTION:

FL

New World: Trinidad

HOSTS:

Bursera simaruba?, Manilkara zapota

coursetiae (Marlatt) Aspidiotus (Diaspidiotus) coursetiae Marlatt; Aspidiotus coursetiae Marlatt; Diaspidiotus coursetiae (Marlatt)

DISTRIBUTION: AZ, FL, TX New World: Mexico, Panama

HOSTS: Polyphagous

covilleae (Ferris)

Aspidiotus covilleae Ferris

DISTRIBUTION:
AZ, CA, NM, TX
New World:
Mexico

HOSTS:

Acacia, Echinocereus, Euonymus, Forchammeria, Larrea, Lycium, Olea, Plumeria, Prosopis pubescens

crypta Howell & Tippins DISTRIBUTION:

GΑ

HOSTS:

Carya illinoensis

diclusa Ferris DISTRIBUTION:

CA

HOSTS:

Juglans regia

herculeana (Doane & Hadden) Aspidiotus herculeanus Doane & Hadden; Aspidiotus subsimilis var. anonae Houser; Clavaspis subsimilis var. anonae (Houser); Chrysomphalus herculeanus (Doane & Hadden)

DISTRIBUTION:

FL, TX New World:

Mexico, many Caribbean Islands, most Central American and

South American countries

Africa:

Guinea, Kenya, Madagascar, Malawi, Mauritius, Mozambique,

Rhodesia Asia:

Philippines, Singapore

Other Areas: Australia, Fiji, Hawaii, New Caledonia, Society Is. (Tahiti) HOSTS: Polyphagous 1 Aspidiotus mori Herrick; Diaspidiotus mori (Herrick) DISTRIBUTION: ΤX HOSTS: Morus alba, M. rubra Aspidiotus pedilanthi Ferris DISTRIBUTION: TX HOSTS: Franseria, Horsfordia, Lycium?, Pedilanthus macrocarpus, Populus, Quercus Aspidiotus subsimilis Cockerell; Hendaspidiotus subsimilis (Cockerell); Aonidiella subsimilis (Cockerell) DISTRIBUTION: ΤX New World: Guatemala, Mexico **HOSTS:** Acacia constricta, Diospyros texana, Jatropha spathulata, Persea, Prosopis, Ptelea tomentosa

texana DISTRIBUTION: Ferris ΤX

mori

(Herrick)

pedilanthi (Ferris)

subsimilis

ulmi

(Cockerell)

HOSTS:

Diospyros texana, Ficus, Morus, Persea, Ziziphus lycioides

Aspidiotus ulmi Johnson; Aonidiella ulmi (Johnson); (Johnson) Hendaspidiotus ulmi (Johnson)

DISTRIBUTION:

CA, CO, CT, DC, GA, IL, IN, KS, LA, MD, MO, MS, NJ, NY,

OH, SC, TX, WI, WV, VA

New World: Canada

HOSTS:

Acer, Aesculus, Catalpa, Celtis, Cornus, Euonymus,

Juglans nigra, Robinia, Tilia, Ulmus

COMSTOCKIELLA

sabalis (Comstock)

<u>Aspidiotus sabalis Comstock; Comstockiella sabalis var.</u>

DISTRIBUTION: CA, GA, FL, LA, MS, NC, SC, TX; greenhouse in NJ*, OH*

New World:

Bahamas, Bermuda, Cuba, Dominican Republic, Guadeloupe,

Mexico Europe:

Germany (greenhouse)

HOSTS:

Arecastrum romanzoffianum, Citrus, Cocos nucifera, Erythea edulis, Latania commersoni, Livistona chinensis, Phoenix dactylifera, Sabal, Serenoa repens, Washingtonia robusta

CRASSASPIS

multipora (Ferris)

<u>Pseudodiaspis multipora</u> Ferris; <u>Situlaspis multipora</u>

(Ferris)

DISTRIBUTION:

AZ, CA New World: Mexico

HOSTS:

Phoradendron flavescens, Prosopis grandulosa

CRENULASPIDIOTUS

mini

DISTRIBUTION:

Davidson

ΑZ

HOSTS: Prosopis

CUPIDASPIS

beshearae Howell & Tippins DISTRIBUTION: AZ, CA, CO, UT

HOSTS:

Calocedrus, Cupressus, Juniperus, Libocedrus

cupressi
 (Coleman)

Leucaspis cupressi Coleman; Lineaspis cupressi (Coleman)

DISTRIBUTION:

CA, CO, NM, OR, TX, UT

HOSTS:

Cupressus, Juniperus, Libocedrus decurrens

DACTYLASPIS

lobata Ferris DISTRIBUTION:

TX

New World: Panama

HOSTS:

Celtis mississippiensis, Erythrina

DIASPIDIOTUS

aesculi (Johnson)

Aspidiotus aesculi Johnson

DISTRIBUTION:

AZ, CA, CO, ID, MT, ND, NM, NV, OR, TX, UT, WA

New World:

Canada (British Columbia, Ontario), Mexico

HOSTS:

Acer, Adelia, Aesculus, Alnus, Arbutus, Fraxinus,

Juglans, Populus, Salix

ancylus (Putnam) Diaspis ancylus Putnam; Aspidiotus ancylus (Putnam);

Aspidiotus solus Hunter; Aspidiotus ohioensis York; Aspidiotus oxycratagei Hollinger

DISTRIBUTION:

General distribution in conterminous U.S.

New World:

Brazil, Canada, Chile, Mexico

Africa: South Africa Other Areas: Australia

HOSTS:

Polyphagous 1

bumeliae Ferris

DISTRIBUTION: KS, OK, TX New World: Mexico

HOSTS:

Bumelia lanuginosa, Crataegus, Maclura aurantiaca

caryae Kosztarab DISTRIBUTION:

GA, OH

HOSTS: Carya

coniferarum (Cockerell) Aspidiotus (Diaspidiotus) coniferarum Cockerell; Comstockiaspis coniferarum (Cockerell)

DISTRIBUTION:

AZ, CA, CO, FL, GA, IN, KS, LA, MS, NM, OR, SC, TX, VA

New World: Mexico

HOSTS:

Abies, Cupressus, Juniperus, Libocedrus decurrens, Pinus

ponderosa var. scopulorum

crystallinus Ferris

DISTRIBUTION:

ΤX

HOSTS: Ironwood (Coleman)

Aspidiotus ehrhorni Coleman

DISTRIBUTION: CA, CO, WA

HOSTS:

Abies concolor, Larix, Libocedrus decurrens, Picea, Pinus, Pseudotsuga taxifolia

liquidambaris (Kotinsky)

<u>Cryptophyllaspis liquidambaris</u> Kotinsky; <u>Chemaspidiotus</u> <u>liquidambaris</u> (Kotinsky)

DISTRIBUTION:

AL, CA, CT, DC, DE, FL, GA, IL, IN, LA, MD, MO, MS, NC, NJ, NY, OH, OK, PA, SC, TN, TX, VA

HOSTS:

Liquidamber styraciflua

mccombi McKenzie DISTRIBUTION:

AL, DC, FL, GA, LA, MD, MS, NC, PA, SC, VA

HOSTS: Pinus

osborni (Newell & Cockerell) Aspidiotus osborni Newell & Cockerell; Aspidiotus yulupae Bremner

DISTRIBUTION:

AL, CA, CT, DC, DE, FL, GA, IA, IL, IN, KS, KY, LA, MA, MD, MI, MO, MS, NC, NH, NJ, NY, NM, OH, OK, PA, SC, TN, TX, VA, VT, WI, WV
New World:
Canada, Mexico

Africa: South Africa

HOSTS:

Often on Quercus. Also Betula, Castanea, Caprinus, Fagus, Fraxinus, Robinia, Tilia, other hosts

(Sanders)

Aspidiotus piceus Sanders, <u>Diaspidiotus hunteri</u> (Newell) of Ferris

DISTRIBUTION: MO, OH, TN

HOSTS:

Fraxinus, Liriodendron tulipifera, Sassafras

<u>uvae</u> (Comstock)

Aspidiotus uvae Comstock

DISTRIBUTION:

AL, AR, CA, CT, DC, DE, FL, GA, IL, IN, KS, KY, MD, MO,

MS, NC, NJ, NY, OH, PA, TN, TX, VA, W

New World:

Brazi1

Africa:

Canary Is.

Europe:

Spain

HOSTS:

Vitis

DIASPIS

boisduvalii Signoret

<u>Aulacaspis</u> <u>boisduvalii</u> (Signoret)

DISTRIBUTION:

Reported from most States; greenhouse in colder areas. Widely distributed throughout the world; greenhouse in temperate areas

HOSTS:

Orchid, palms, other hosts

bromeliae (Kerner)

<u>Coccus</u> <u>bromeliae</u> Kerner; <u>Aulacaspis</u> <u>bromeliae</u> (Kerner)

DISTRIBUTION:

CA, DC*, FL, IL*, MO, NJ, NY*, OH*, PA*: greenhouse in

colder areas New World:

Antigua, Argentina, Bahamas, Brazil, Belize, Colombia,

Cuba, Costa Rica, Dominica, Dominican Republic,

Guadeloupe, Guatemala, Guyana, Haiti, Jamaica, Martinique,

Mexico, Puerto Rico, St. Lucia, St. Vincent, Trinidad,

Venezuela

Europe:

Azores; greenhouse in Belgium, Czechoslovakia, England, Denmark, France, Germany, Hungary, Italy, Netherlands,

Poland, Sweden

USSR: Greenhouse Africa:

Egypt, Kenya, Madeira Is., Mauritius, Morocco, Mozambique,

Seychelles, South Africa, Sierra Leone

Okinawa, Philippines, Taiwan

Other Areas:

Australia, Bonin Is., Fiji, Hawaii, New Caledonia,

Pitcairin Is., Ponape, Samoa, Tahiti

HOSTS:

Ananas comosus, bromeliads

coccois Lichtenstein

Diaspis tentaculatus Morgan; Aulacaspis coccois (Lichtenstein); Diaspis cocois (Lichtenstein)

DISTRIBUTION:

CA: (FL eradicated)

New World: Jamaica Europe: France Africa: Algeria

HOSTS:

Cocos nucifera, orchid

dignus Hoke

DISTRIBUTION: FL, GA, MS

HOSTS:

Eryngium aquaticum, E. aromaticum, Liriope spicata

diospyri

DISTRIBUTION:

TX

HOSTS:

Diospyros texana

echi nocacti (Bouche)

Aspidiotus echinocacti Bouche; Diaspis calyptroides Costa; Diaspis cacti Comstock; Diaspis opuntiae Cockerell;

Diaspis opunticola Newstead

DISTRIBUTION:

Reported from most States; greenhouse in temperate areas

New World:

Widely distributed

Europe:

Greenhouse or out of doors in Mediterranean region; Azores

JSSR:

Greenhouse

Africa:

Algeria, Cameroon, Canary Is., Egypt, Guinea, Madagascar,

Madeira Is., Mauritius, Morocco, Mozambique, Reunion,

Senegal, South Africa, St. Helena

Asia:

India, Iran, Iraq, Israel, Japan, Pakistan, Philippines,

Syria, Turkey Other Areas: Australia, Hawaii

HOSTS: Cactaceae

gilloglyi
 (McKenzie)**

DISTRIBUTION: (CA eradicated)

New World:

Belize, Guatemala, Jamaica, Mexico

HOSTS:

Bromeliad, Tillandsia

manzanitae
 (Whitney)

<u>Aulacaspis</u> manzanitae Whitney

DISTRIBUTION:

CA

HOSTS:

Arctostaphylos

parasiti McKenzie DISTRIBUTION:

CA

HOSTS:

Phoradendron flavescens

radicicola Ferris DISTRIBUTION:

ΤX

New World: Mexico Africa: Algeria

HOSTS:

Opuntia, roots of unknown plant

simmondsiae Ferris DISTRIBUTION:

ΑZ

New World: Mexico

HOSTS:

Idria, Simmondsia

texensis (Cockerell)

<u>Aulacaspis</u> texensis Cockerell

DISTRIBUTION:

TX

New World: Mexico

HOSTS:

<u>Castela</u> <u>nicholsoni</u>, <u>Koeberlinia spinosa</u>, <u>mistletoe</u>, <u>sapote</u>, <u>Sophora secundiflora</u>, <u>Wistaria</u>, other hosts

toumeyi Cockerell DISTRIBUTION:

AZ, TX

New World:

Mexico

HOSTS:

Holacantha emoryi, Koeberlinia spinosa

DUPLASPIDIOTUS

claviger (Cockerell)

Pseudaonidia clavigera Cockerell

DISTRIBUTION:

FL

New World: Panama

Africa:

Seychelles, South Africa

Asia:

China, Indonesia, Japan, Sri Lanka, Taiwan

Other Areas:

Guam, Hawaii, Tahiti

HOSTS:

Polyphagous

(Grandpre & Charmoy)

Aspidiotus (Diaspidiotus) tesseratus Grandpre & Charmoy; Lattaspidiotus tesseratus (de Charmoy); Pseudaonidia tesserata (de Charmoy)

DISTRIBUTION:

FL

New World:

Caribbean Islands, Bahamas, Brazil, Colombia, Ecuador, El Salvador, Guatemala, Guyana, Mexico, Nicaragua, Panama,

Venezuela Africa:

Ghana, Kenya, Liberia, Mauritius, Mozambique, Rhodesia,

Rodrigues, South Africa, Uganda

Asia:

India, Indonesia (Java), Pakistan, Sri Lanka

Other Areas: Guam, Hawaii

HOSTS:

Polyphagous

DYNASPIDIOTUS

britannicus (Newstead)

Aspidiotus britannicus Newstead

DISTRIBUTION:

CA, IL*, IN*, MA*, MI*, OR, PA*, WA

New World:

Bermuda, Brazil, Canada (British Columbia)

Europe:

Many countries

USSR:

Crimea, Black Sea coast, Caucasus; greenhouse

Africa:

Algeria, Egypt, Madeira Is., Morocco

Asia:

Israel, Turkey

HOSTS:

Polyphagous, often on Buxus, Hedera, Ilex, Laurus

EPIDIASPIS

leperii (Signoret) Diaspis leperii Signoret; Diaspis pyri Colvee; Diaspis piricola Del Guercio; Epidiaspis piricola (Del Guercio)

DISTRIBUTION:

CA, CT, MD, MT, NY, OK*, PA*, RI

New World:

Argentina, Chile, Mexico, Uruguay

Europe:

Central and southern regions: Azores

Southern European region

Africa:

Algeria, Madeira Is., Morocco, Tunisia

Asia:

Iran, Turkey

HOSTS:

Malus, Prunus, Pyrus, Rosaceae and other hosts

montana (Cockerell) Aulacaspis montana Cockerell: Diaspis montana (Cockerell)

DISTRIBUTION:

AZ, NM

HOSTS: Quercus

salicicola Ferris

DISTRIBUTION:

AZ, CA

HOSTS:

Phoradendron californicum, Salix

tillandsiae Takagi & **Tippins**

DISTRIBUTION:

FL

HOSTS:

Tillandsia usneoides

EXUVIASPIS

enceliae Ferris

DISTRIBUTION:

CA

New World: Mexico

HOSTS: Encelia

FERRISIDEA

magna
(Ferris)

Pseudodiaspis magna Ferris

DISTRIBUTION:

CA, TX New World: Mexico

HOSTS: Lycium

FIORINIA

<u>externa</u> <u>Ferris</u> DISTRIBUTION:

CT, DC, MA, MD, NJ, NY, OH, PA, RI, VA

Asia: Japan

HOSTS:

Abies, Cedrus, Pinus, Pseudotsuga, Taxus, Tsuga

fioriniae (Targioni-Tozzetti)

<u>Diaspis fioriniae</u> Targioni- Tozzetti; <u>Fiorinia pellucida</u> Targioni-Tozzetti; Uhleria fioriniae (Targioni-

Tozzetti); Uhleria camelliae Comstock; Fiorinia camelliae

(Comstock)

DISTRIBUTION:

CA, CT*, DC*, FL, GA, IL*, MA*, MS*, OH*, OK, PA*, SC*,

TX; greenhouse in colder areas

New World:

Argentina, Barbados, Bermuda, Brazil, Costa Rica, Cuba, Dominican Republic, Jamaica, Mexico, Nevis, Peru, Puerto

Rico, Trinidad

Europe:

Azores, Italy, Malta, Spain; greenhouse in England,

France, Germany, Ireland, Monaco, Romania

1199P ·

Greenhouse in European part

Africa:

Algeria, Canary Is., Egypt, Madeira Is., Mauritius,

Madagascar, Morocco, Mozambique, South Africa, Tanzania. Asia:

China, India, Israel, Japan, Malay Peninsula, Philippines, Sri Lanka, Taiwan, Turkey

Other Areas:

Australia, Bonin Is., Canton Is., Hawaii, New Caledonia

HOSTS:

Polyphagous

japonica Kuwana

Fiorinia fioriniae var. japonica Kuwana

DISTRIBUTION:

VA; (CA eradicated)

Asia:

China, India, Japan, Philippines, Sri Lanka, Taiwan

Other Areas:

Bonin Is., Mauritius

HOSTS:

Abies, Cedrus, Juniperus, Keteleeria, Picea, Pinus, Podocarpus, Taxus, Tsuga

pinicola Maskell

Fiorinia juniperi Leonardi

DISTRIBUTION:

GA (Cumberland Is.); (CA eradicated)

Asia:

Hong Kong, Japan, Taiwan

Europe:
Portugal
Other Areas:
Bonin Is.

HOSTS:

Acuba, Cephalotaxus, Cupressus, Eurya, Ficus, Myrica,

Pinus, Pittosporum, Podocarpus, Sciadopitys, Thea, Torreya

theae Green

DISTRIBUTION:

AL, AR, DC, FL, GA, IN, LA, MA, MD, MO, MS, NC, NY, OK,

PA, SC, TX, VA; (CA eradicated)

New World:

Bahamas, Honduras, Mexico

Asia:

China, Hong Kong, India, Indonesia, Japan, Sri Lanka,

Taiwan

HOSTS: Camellia, Citrus, Eurya, Ilex, Thea, other hosts

FISSURASPIS

ulmi (Hoke) Crypthemichionaspis ulmi Hoke

DISTRIBUTION:

FL, GA, MS, TN, TX

HOSTS:

Ulmus, U. americana

FURCASPIS

biformis (Cockerell) Aspidiotus biformis Cockerell; Chrysomphalus biformis (Cockerell)

DISTRIBUTION:

CO*, DC*, FL, NJ*, WA*

New World:

Mexico, most of Central and South America, many Caribbean

Islands Europe:

Germany (greenhouse)

Asia:

Indonesia, Malaya, Philippines, Singapore, Sri Lanka,

Thailand Other Areas: Australia, Hawaii

HOSTS:

Agave, orchid, Pedilanthus tithymaloides,

Philodendron

FURCHADASPIS

zamiae
 (Morgan)

<u>Diaspis zamiae Morgan; Aulacaspis zamiae (Morgan);</u> Furchadiaspis zamiae (Morgan)

DISTRIBUTION:

CA; greenhouse in MA*, MD*, MO*, NY, PA, WI*

New World:

Argrentina, Bermuda, Chile, Guatemala

Europe:

Azores, France, Italy, Portugal, Spain; greenhouse in

Czechoslovakia, Denmark, Germany, Great Britain, Poland,

Sweden

USSR:

Greenhouse

Africa:

Algeria, Canary Is., Cameroon, Egypt, Madeira Is.,

Morocco, Mozambique, South Africa, Rhodesia, Swaziland

Asia: Turkey

Other Areas:

Australia, Hawaii

HOSTS:

<u>Ceratozamia mexicana, Cussonia spicata, Cycadaceae, Cycas</u> revoluta, Dioon edule, Encephalartos villosus, Rhus,

Strelitzia

GENAPARLATORIA

pseudaspidiotus (Lindinger)

<u>Parlatoria</u> <u>pseudaspidiotus</u> <u>Lindinger</u>; <u>Parlatoria</u> <u>mangiferae</u> <u>Marlatt</u>

DISTRIBUTION:

FL; greenhouse in DC*, CO*, TN

New World:

Barbados, Colombia, Costa Rica, Guyana, Jamaica, Panama,

Puerto Rico, Surinam, Trinidad

Europe:

Greenhouse in England, Germany

Africa: Sudan

Asia:

Burma, India, Indonesia, Japan, Malaya, Pakistan, Philippines, Singapore, Sri Lanka, Thailand, Vietnam

Other Areas:

Bonin Is., Guam, Hawaii, Ponape, Samoa

HOSTS:

Dendrobium, Mangifera indica, Orchidaceae, Plumeria,

Vanda

GEODIAPIS

arundinariae Tippins & Howell DISTRIBUTION:

GA

HOSTS:

Arundinaria

GYMNASPIS

aechmeae Newstead DISTRIBUTION:

AL, FL; greenhouse in DC, MD, NJ, MO*, NY*, PA*

New World:

Argentina, Brazil, Costa Rica, Jamaica, Puerto Rico

Europe:

Greenhouse in Belgium, Bulgaria, England, France, Germany,

Italy, Poland, Romania, Sweden

USSR:

Greenhouse Asia: Japan+

HOSTS:

Bromeliaceae, other hosts

HALIASPIS - 1

asymmetrica (Ferris)

Duplachionaspis asymmetrica Ferris

DISTRIBUTION:

FL, SC

HOSTS: Aristida

litoralis (Ferris) Duplachionaspis litoralis Ferris

DISTRIBUTION:

TX

HOSTS:

Monanthocloe littoralis, Sporobolus wrightii

mackenziei
(McDaniel)

<u>Duplachionaspis mackenziei</u> McDaniel

DISTRIBUTION:

TX

HOSTS:

Monanthocloe littoralis

peninsularis Howell DISTRIBUTION:

FL

HOSTS: Distichilis, Spartina spartinae

spartinae (Comstock)

<u>Chionaspis spartinae</u> Comstock; <u>Duplachionaspis</u> spartinae (Comstock)

DISTRIBUTION:

CA, DE, FL, GA, MA, NJ, NY, SC, TX, VA

HOSTS:

Distichilis, Spartina

uniolae Takagi DISTRIBUTION: FL, GA, LA

HOSTS:

Spartina, Uniola, grass

HEMIBERLESIA

candidula (Cockerell) Aspidiotus (Hemiberlesia) candidulus Cockerell; Diaspidiotus candidulus (Cockerell)

DISTRIBUTION:

AZ, CA New World: Mexico

HOSTS:

Prosopis velutina, Phoradendron, Yucca

diffinis
(Newstead)

Aspidiotus diffinis Newstead; Aspidiotus jatrophae Townsend & Cockerell; Aspidiotus diffinis parrotti Newell

DISTRIBUTION:

AL, AR, DC, FL, GA, IL, KS, LA, MD, MO, MS, NC, NJ, NY, OH, SC, TN, TX, VA

011, 50, 111, 17

New World:

Argentina, Brazil, Canada, Colombia, Costa Rica, Curacao, Dominica, Ecuador, Guyana, Jamaica, Mexico, Nicaragua,

Panama, St. Kitts, Trinidad

HOSTS:

Polyphagous

(Signoret)

Aspidiotus lataniae Signoret; Aspidiotus cydoniae Comstock; Aspidiotus punicae Cockerell

DISTRIBUTION:

AL, AR, AZ, CA, CO, DC, DE, FL, GA, IA, IL, IN*, KS, LA, MA, MD, MI*, MO, MS, NC, NJ, NY, OH, OK, PA, SC, TN, TX, VA; greenhouse in northern states. Widespread throughout the tropical and subtropical areas of the world; greenhouse in temperate areas

HOSTS: Polyphagous

palmae (Cockerell)

Aspidiotus palmae Cockerell; Abgrallaspis palmae (Cockerell); Furcaspis palmae (Cockerell); Borchseniaspis palmae (Cockerell)

DISTRIBUTION:

FL, (CA Eradicated)

New World:

Antigua, Bolivia, Brazil, Central America, Chile, Colombia, Cuba, Dominica, Ecuador, Guyana, Jamaica, Mexico, Peru, Puerto Rico, St. Kitts, St. Lucia, Surinam, Trinidad Europe:

Greenhouse in Belgium, England, Germany, Netherlands, Poland, Portugal

USSR:

Greenhouse

Africa:

Ghana, Guinea, Kenya, Madeira Is., Principe, Sao Tome, Seychelles, South Africa, Tanzania, Togo, Zaire, Zanzibar. Asia:

China, Cyprus, India, Indonesia, Malaysia, Philippines, Singapore, Sri Lanka, Thailand, Vietnam Other Areas:

Australia, Fiji, Guam, Kusaie, New Guinea, Palau Is. Ponape, Saipan, Solomon Is., Tonga, Wotje Atoll, Yap Is.

HOSTS: Polyphagous

popularum (Marlatt)

Aspidiotus (Hemiberlesia) popularum Marlatt

DISTRIBUTION:
AZ, CA, ID, MT, NM, UT, TX
New World:
Canada (Alberta), Mexico

HOSTS:

Malus, mistletoe, Populus, Salix

pseudorapax McKenzie DISTRIBUTION:

ΑZ

HOSTS: Abies

rapax (Comstock)

Aspidiotus rapax Comstock; Aspidiotus camelliae Signoret; Hemiberlesia camelliae (Signoret)

DISTRIBUTION:

AL, CA, DC, FL, GA, ID, IN, IL, LA, MD, MI, MS, NJ, NY,

OH, OR, PA, SC, TX, VA, WA

New World:

Argentina, Brazil, Bolivia, Chile, Colombia, Costa Rica, Cuba, Ecuador, Guyana, Guatemala, Mexico, Peru, Puerto

Rico, Uruguay

Europe:

Many countries; Azores

USSR:

Armenia, Georgia

Africa:

Algeria, Canary Is., Egypt, Kenya, Madagascar, Madeira Is., Malawi, Mauritius, Morocco, Reunion, Rhodesia, South

Africa, Tanzania

Asia:

China, India, Iran, Israel, Japan, Philippines, Okinawa,

Sri Lanka, Syria, Taiwan

Other Areas:

Australia, Bonin Is., Christmas Is., Hawaii, New Zealand

HOSTS:

Polyphagous

HEMIGYMNASPIS

jessopae Davidson & Miller

DISTRIBUTION:

FL

HOSTS:

Eugenia simpsonii

HOWARDIA

biclavis (Comstock)

Chionaspis? biclavis Comstock

DISTRIBUTION:

FL; greenhouse in DC*, KS*, MD, NY*, OH*, PA, MO; (CA eradicated)

New World:

Bahamas, Bermuda, Brazil, Central America, Caribbean Islands, Colombia, Ecuador, French Guiana, Galapagos Is.,

Guyana, Mexico, Peru, Venezuela

Europe:

Greenhouse in Czechoslovakia, England, France, Germany,

Ireland, Italy, Poland, Switzerland

USSR:

Greenhouse

Africa:

Ghana, Kenya, Madagascar, Madeira Is., Malawi, Mauritius,

Rhodesia, Rodrigues, South Africa, Sao Tome

Asia

India, Indonesia, Philippines, Singapore, Sri Lanka,

Taiwan

Other Areas:

Australia, Bonin Is., Fiji, Hawaii, New Caledonia, New

Guinea, Palau Is., Truk Is.

HOSTS:

Polyphagous

ISCHNASPIS

longirostris (Signoret)

<u>Mytilaspis</u> <u>longirostris</u> <u>Signoret; <u>Ischnaspis</u> <u>filiformis</u> <u>Douglas</u></u>

DISTRIBUTION:

CT*, DC, FL, GA, IL*, LA, MA*, MD, MO, NJ, NY, OH, OK,

PA, TN, WI*; greenhouse in colder areas

New World:

Bahamas, Bermuda, Canada (greenhouse), Caribbean Islands,

Central America, Brazil, Colombia, Ecaudor, Guyana,

Mexico, Surinam, Venezuela

Europe:

Italy; greenhouse in Czechoslovakia, England, France,

Denmark, Germany, Ireland, Sweden

USSR:

Greenhouse

Africa:

Cameroon, Canary Is., Egypt, Ethiopia, Ghana, Guinea,

Kenya, Madagascar, Mauritius, Mozambique, Nigeria, Principe, Reunion, Rhodesia, Sao Tome, Seychelles, Sierra Leone, South Africa, Tanzania, Uganda, Zaire Asia:

India, Indonesia, Japan, Malaysia, Philippines, Singapore,

Sri Lanka Other Areas:

Australia, Bonin Is., Fiji, Hawaii, Mariana Is., New Caledonia, New Guinea, Palau Is., Solomon Is., Tonga

HOSTS: Polyphagous

KUWANASPIS

hikosani (Kuwana) <u>Chionaspis?</u> <u>hikosani</u> Kuwana; <u>Tsukushiaspis</u> <u>hikosani</u> (Kuwana)

DISTRIBUTION:

GA, SC: greenhouse in NY*

Asia: Japan

HOSTS:

bamboo, Phyllostachys bambusoides, Sasa

howardi (Cooley) <u>Chionaspis howardi Cooley; Kuwanaspis phyllostachydis</u> Borchsenius & Chadbidjeli

DISTRIBUTION:

DC*, GA, LA, MS, NJ*, TX

Asia:

Japan, Korea

USSR:

Caucasian region of Black sea, southern Crimea

Other Areas: Bonin Is.

HOSTS:

Arundinaria, bamboo, Phyllostachys

pseudoleucaspis
(Kuwana)

<u>Chionaspis pseudoleucaspis</u> <u>Kuwanaspis bambusae</u> (Kuwana); <u>Chionaspis pseudoleucaspis</u> Kuwana; <u>Tsukushiaspis</u> <u>pseudoleucaspis</u> (Kuwana) DISTRIBUTION:

AL, CA, DC*, FL, GA, MD*, NJ*, SC; greenhouse in NY*, VA*

France, Italy; greenhouse in England, Germany, Poland.

USSR:

Crimea, Black Sea coast of western Georgia

Africa:

Algeria, Morocco

Asia:

China, Japan, Korea, Taiwan, Turkey

Other Areas:

Hawaii

HOSTS:

Arundinaria, bamboo, Bambusa, Phyllostachys,

Semiarundinaria, Sinobambusa

LAPAZIA

obscura Howell & Beshear

DISTRIBUTION:

TX

HOSTS: Atriplex

LEPIDOSAPHES

beckii (Newman)

Coccus beckii Newman: Aspidiotus citricola Packard; Mytilaspis <u>beckii</u> (Newman); <u>Lepidosaphes citricola</u> (Packard); <u>Cornuaspis beckii</u> (Newman)

DISTRIBUTION:

AL, CA, GA, FL, LA, MS, SC*, TX; greenhouse in KS, MO, NC, NY, OK, PA, TN. Widely distributed throughout the

tropical and subtropical areas of the world

HOSTS:

Citrus and other hosts

boguschi McDaniel DISTRIBUTION:

TX

HOSTS:

Maurandia antirrhiniflora

<u>Camelliae</u> Hoke <u>Insulaspis</u> <u>camelliae</u> (Hoke)

DISTRIBUTION:

AL, AR, CT, DE, FL, GA, LA, MA, MD, MO, MS, NC, NY, OK,

OR, SC, TX, VA; (CA eradicated)

New World:

Mexico Asia:

China, Japan, Okinawa

HOSTS:

Camellia, Cleyera, Ilex, Ligustrum, Rhaphiolepis, Thea

chinensis
Chamberlin**

Cornuaspis chinensis (Chamberlin)

DISTRIBUTION:

(CA eradicated)

Asia:

China, Singapore, Taiwan

HOSTS:

Cymbidium, Magnolia, palm, Schomburgkia

conchi formio ides
Borchsenius

Mytilaspis conchiformioides (Borchsenius)

DISTRIBUTION:

DC*, MD, MO

Asia:

China, Japan, Korea

HOSTS:

Althea, Cydonia, Diospyros, Fraxinus, Malus, Pyrus,

Prunus, Punica, Syringa, Wistaria, other hosts

conchiformis
(Gmelin)

Coccus conchiformis Gmelin; Mytilaspis conchiformis (Gmelin); Mytilaspis ficus Signoret; Lepidosaphes ficus (Signoret); Lepidosaphes ficifoliae (Berlese); Mytilococcus ficifoliae (Berlese); Lepidosaphes conchyformis form conchyformis Gmelin; Lepidosaphes conchyformis form minima Newstead

DISTRIBUTION:

CA

New World:

Argentina, Chile

Europe

Africa:

North Africa

USSR

Asia:

Iran, Iraq, Israel, Pakistan, Syria, Turkey

HOSTS:

Polyphagous; often on Ficus

<u>destefanii</u> <u>Leonardi</u>

<u>Mytilococcus destefanii</u> (Leonardi); <u>Mytilaspis flava</u> Targioni-Tozzetti; <u>Lepidosaphes</u> <u>flava</u> (Targioni-Tozzetti)

DISTRIBUTION:

CA

Europe:

France, Greece, Italy, Spain

Africa: Tunisia USSR:

Abkhazia, Crimea, Turkmen SSR

Asia: Israel

HOSTS:

Olea, Phillyrea

gloverii (Packard)

Aspidiotus gloverii Packard; Mytilaspis gloverii (Packard); Mytilococcus gloverii (Packard); Insulaspis gloverii (Packard)

DISTRIBUTION:

AL*, CA, FL, LA, SC, TX; greenhouse in OK. Widely distributed throughout the tropical and subtropical areas of the world

HOSTS:

Citrus and other hosts

machili (Maskell)

Mytilaspis machili Maskell; Lepidosaphes tuberculata Malenotti; Lepidosaphes cymbidicola Kuwana; Lepidosaphes cinnamoni Takahashi; Eucornaspis machili (Maskell); Eucornaspis pinnaeformis (Bouche)

DISTRIBUTION:

CA, FL; greenhouse in DC, DE, MA, MD, NJ, NY, PA

New World:

Brazil+, Guatemala

Europe:

Greenhouse in Belgium, Czechoslovakia, England, France,

Germany, Italy, Netherlands, Sweden

USSR:

Greenhouse

Asia:

China, India, Japan, Korea, Nepal, Taiwan, Thailand

Other Areas:

Australia, Bonin Is., Hawaii, New Zealand

HOSTS:

Cinnamonum, Cymbidium, Dendrobium, Machilus, Orchidaceae,

other hosts

noxia McKenzie** Insulaspis noxia (McKenzie)

DISTRIBUTION:

(CA eradicated)

Asia:

Philippines

Other Areas:

Hawaii

HOSTS:

Dendrobium, Vanda

pallida (Maskell) Mytilaspis pallida Green (var.?) Maskell; Mytilaspis pallida v. maskelli Cockerell; Lepidosaphes maskelli (Cockerell); Insulaspis maskelli (Cockerell); Insulaspis pallida (Maskell); Lepidosaphes newsteadi

(Sulc) of Ferris (misidentification)

DISTRIBUTION:

AL, AR, CA, DC, DE, FL, GA, LA, MD, MS, NC, NJ, NY, PA, VA

New World:

Bermuda

Asia:

China, Japan, Korea, Taiwan

USSR:

Caucasian shore of Black Sea

Other Areas:

Hawaii

HOSTS:

Cephalotaxus, Chamaecyparis, Cryptomeria, Cupressus, Juniperus, Picea, Podocarpus, Sciadopitys, Sequoia,

Taxodium, Taxus, Thuja

pini (Maskell) Poliaspis pini Maskell; Insulaspis pini (Maskell)

DISTRIBUTION:

MD (Towson), PA (Chester Co., Delaware Co.,

Montgomery Co.)

Asia:

China, Japan, Korea, Taiwan

Other Areas:

Bonin Is., Hawaii

HOSTS:

Pinus

sciadopitysi McKenzie

Insulaspis sciadopitysi (McKenzie)

DISTRIBUTION:

CA, CT, DC, NY, OH, PA

HOSTS:

Sciadopitys

tokionis (Kuwana) ** Mytilaspis newsteadi v. tokionis Kuwana; Lepidosaphes auriculata (Green); Lepidosaphes lasianthi (Green) of Ferris (misidentification): Insulaspis tokionis (Kuwana)

DISTRIBUTION:

MS*; greenhouse in MA*; (CA eradicated)

New World:

Antigua, Bahamas, Barbados, Bermuda, Brazil, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, Guatemala, Guyana, Jamaica, Mexico, Panama, Puerto Rico, St. Lucia,

Trinidad, Venezuela, Virgin Islands

Africa:

Madagascar, Mauritius, Mozambique, Reunion, Seychelles, Zanzibar

Asia:

Burma, Hong Kong, India, Indonesia, Japan, Pakistan, Philippines, Singapore, Sri Lanka, Taiwan, Thailand

Other Areas:

Australia, Bonin Is., Fiji, Guam, Hawaii, Marquesas Is.,

Palau Is., Saipan, Tahiti, Truk Is.

HOSTS: Codiaeum <u>ulmi</u> (Linnaeus) Coccus ulmi Linnaeus; Aspidiotus pomorum Bouche;
Mytilaspis pomorum (Bouche); Mytilococcus ulmi (Linnaeus)

DISTRIBUTION:

Most states in conterminous U.S.

New World:

Argentina, Brazil, Canada, Colombia, Chile, Mexico,

Peru, Uruguay

Europe USSR Africa:

North Africa, Canary Is., Madeira Is., South Africa

Asia:

China, Cyprus, Iran, Iraq, Israel, Japan, Korea, Saudi

Arabia, Syria, Taiwan, Turkey

Other Areas:

Australia, New Zealand

HOSTS: Polyphagous

yanagicola Kuwana Insulaspis yanagicola (Kuwana)

DISTRIBUTION:

GA, IN, MA, MD, MO, NJ, OH, OK, PA, RI, TN, VA, WV

Asia:

China, Japan, Korea

USSR:

Saghalin Is., Ussuri area

HOSTS:

Albizzia, Celastrus, Euonymus, Pachysandra, Salix,

Tilia, Ulmus

LEUCASPIS

portaeureae (Ferris) DISTRIBUTION:

CA (one localized infestation.)

HOSTS: Podocarpus

LINDINGASPIS

floridana Ferris Chrysomphalus floridanus (Ferris)

DISTRIBUTION:

FL

New World:

Haiti, Jamaica

Asia:

India, Pakistan, Philippines, Thailand

Africa: Egypt

HOSTS:

Polyphagous; often on Mangifera indica

rossi (Maskell)

Aspidiotus rossi Maskell; Chrysomphalus rossi (Maskell)

DISTRIBUTION:

CA; greenhouse in NY*

New World:

Argentina, Brazil, Chile, Mexico, Peru

Europe:

England (Kew garden), Italy (Sicily), Monaco, Portugal,

Spain Africa:

Guinea, Madeira Is., Mauritius, Mozambique, Reunion,

Rhodesia, South Africa, Tanzania, Togo

Asia:

China, India, Japan, Philippines, Sri Lanka, Taiwan

Other Areas:

Australia, Hawaii, New Caledonia, New Zealand

HOSTS:

Polyphagous

LOPHOLEUCASPIS

cockerelli (Grandpre & Charmoy)

Fiorinia cockerelli Grandpre & Charmony; Leucaspis cockerelli (de Charmoy); Leucodiaspis cockerelli (de Charmoy); Lopholeucaspis cockerelli (de Charmoy)

DISTRIBUTION:

FL; greenhouse in MA*, NY*, (CA eradicated)

New World:

Bahamas, Bermuda, Brazil, Central America, Colombia, Cuba, Dominica, Dominican Republic, Ecuador, Grenada, Jamaica, Martinique, Mexico, Peru, Puerto Rico, Trinidad, Venezuela

Europe:

Greece+; greenhouse in England, Germany

Africa:

Cameroon, Guinea, Kenya, Liberia, Madagascar, Mauritius,

Principe, Seychelles, Sierra Leone, Tanzania, Zaire

Asia:

India, Indonesia, Philippines, Sri Lanka

Other Areas:

Australia, Bonin Is., Fiji, Hawaii, Niue, Ponape, Tonga

HOSTS:

Polyphagous

japonica (Cockerell)

Leucaspis japonica Cockerell

DISTRIBUTION:

CT, DC, DE, GA, MD, NJ, NY, PA, RI, VA

New World: Brazil USSR:

Crimea, Georgia, far east (Vladivostok)

Asia:

Afghanistan, China, Iran, Japan, Korea, Okinawa, Taiwan,

Turkey

HOSTS:

Polyphagous

MELANASPIS

aliena (Newstead)**

Aspidiotus alienus Newstead; Chrysomphalus alienus (Newstead); Pseudischnaspis alienus (Newstead)

DISTRIBUTION:

(FL eradicated)

New World:

Brazil, Central America, Cuba, Ecuador, Jamaica, Mexico,

Puerto Rico+

Europe:

England (greenhouse)

Other Areas:

Hawaii+

HOSTS:

Orchidaceae

bromeliae (Leonardi)

Aonidiella bromiliae Leonardi; Aspidiotus bromiliae (Leonardi); Chrysomphalus bromeliae (Leonardi); Pseudischnaspis anassarum Lindinger; Targionia bromeliae (Leonardi); Melanaspis smilacis (Comstock) of Ferris (misidentification in part)

DISTRIBUTION:

FL; greenhouse in PA

New World:

Brazil, Colombia, Costa Rica, Cuba, Guatemala, Haiti, Honduras, Jamaica, Martinique, Mexico, Panama, Puerto Rico

Azores, Portugal; greenhouse in Belgium+, England,

Netherlands+

Africa:

Canary Is., Cameroon, Guinea, Ivory Coast, South Africa,

Seychelles, Togo

Asia: Taiwan

Other Areas:

Hawaii, Guam, Palau Is., Ponape, Yap Is.

HOSTS:

Ananas comosus, Cocos nucifera, other hosts

coccolobae Ferris DISTRIBUTION:

FL

New World:

Bahamas, Barbados, Cuba, Dominican Republic, El Salvador, Grenada, Guatemala, Haiti, Honduras, Jamaica, Martinique,

Mexico, Panama, Puerto Rico, St. Croix, Venezuela

HOSTS: Coccoloba

delicata Ferris DISTRIBUTION:

ΤX

HOSTS: Prosopis

<u>deliquescens</u> Ferris DISTRIBUTION:

ΤX

HOSTS:

Acacia constricta

elaeagni McKenzie DISTRIBUTION:

LA, TX New World:

Costa Rica, Guatemala

HOSTS:

Celtis, Elaeagnus, Pithecellobium, Populus, Yucca

latipyga Ferris DISTRIBUTION:

ΤX

New World:

Costa Rica, Mexico, Panama

HOSTS:

Celtis, Coccoloba, Fraxinus, Piper, Salix, Solanum,

Spondias, other hosts

lilacina (Cockerell) Aspidiotus (Chrysomphalus) lilacinus Cockerell;

Chrysomphalus lilacinus (Cockerell)

DISTRIBUTION:

AZ, CA, NM, OK, TX

HOSTS: Quercus

marlatti (Parrott) Aspidiotus (Targionia) marlatti Parrott; Targionia marlatti (Parrott); Targaspidiotus marlatti (Parrott)

DISTRIBUTION: GA, KS, SD, TX

HOSTS:

Andropogon, Panicum virgatum

mimosae (Comstock) Aspidiotus mimosae Comstock; Chrysomphalus mimosae

(Comstock)

DISTRIBUTION:

FL* (1920 record)

New World: Mexico

HOSTS:

mimosa, Spondias, Tillandsia

nigropunctata (Cockerell) Aspidiotus nigropunctatus Cockerell; Chrysomphalus

nigropunctatus (Cockerell)

DISTRIBUTION:

DC, TX, VA

New World:

Costa Rica, Guatemala, Mexico, Panama, Puerto Rico

HOSTS:

Baccharis, Cornus, Echeveria, Epidendrum, Fraxinus, Guaiacum officinale, Laelia majalis, Philodendron, Prunus capuli, Randia, Salix

obscura (Comstock) Aspidiotus obscurus Comstock; Chrysomphalus obscurus (Comstock)

DISTRIBUTION:

AL, AR, CA, CT, DE, FL, GA, IA, IL, IN, LA, KS, KY, MD, MO, MS, NC, NJ, NY, OH, OK, PA, SC, TN, TX, VA, WV

New World:

Canada (Ontario)

HOSTS:

Acer, Carya, Castanea, Cornus, Fagus, Juglans, Planera aquatica, Prosopis, Quercus, Sapindus, Ulmus, Viburnum obovatum, Vitis

odontoglossi (Cockerell)** Aspidiotus biformis v. odontoglossi Cockerell; Aspidiotus odontoglossi Cockerell; Chrysomphalus odontoglossi (Cockerell); Melanaspis obtusa Ferris

DISTRIBUTION:

NY* in greenhouse

New World:

Galapagos Is., Jamaica, Mexico, Panama

HOSTS:

Polyphagous

smilacis (Comstock) Aspidiotus smilacis Comstock; Chrysomphalus smilacis (Comstock)

DISTRIBUTION:

DC, FL, GA, LA, MA, MD, SC, TX, VA

New World:

Mexico

HOSTS:

Dasylirion, Nolina, Smilax

tenebricosa (Comstock)

Aspidiotus tenebricosus Comstock; Chrysomphalus tenebricosus (Comstock); Aonidiella tenebricosa (Comstock)

DISTRIBUTION:

AL, AR, DC, DE, FL, GA, IL, KY, LA, MD, MO, MS, NC, NJ, NY, OH, OK, PA, SC, TN, TX, VA, WV

HOSTS:

Polyphagous

MORGANELLA

cueroensis (Cockerell)

Aspidiotus cueroensis Cockerell; <u>Targionia</u> <u>cueroensis</u> (Cockerell); <u>Targionia</u> <u>celtis</u> Herrick

DISTRIBUTION:

FL, GA, LA, MD, MS, SC, TX

New World:

Mexico

HOSTS:

Acacia flexicaulis, Acer, Carica papaya, Celtis, Decumaria barbara, Fagara, Magnolia, Myrica cerifera, Parthenocissus, Persea, Pithecellobium dulce

longispina (Morgan)

Aspidiotus longispinus Morgan; Aspidiotus maskelli Var. ornatus Maskell; Morganella maskelli (Cockerell)

DISTRIBUTION:

FL (Miami)

New World:

Antigua, Bahamas, Barbados, Bermuda, Brazil, Costa Rica, Dominican Republic, Guatemala, Guyana, Haiti, Jamaica, Puerto Rico, St. Martin, Tabago, Trinidad

Africa:

Algeria, Cameroon, Mauritius, Mozambique, Rodrigues, Sao

Tome, South Africa

Asia:

China, Hong Kong, India, Indonesia, Japan, Philippines,

Sri Lanka, Taiwan

Other Areas:

Australia, Fiji, Guadalcanal, Hawaii, Marquesas Is., New Caledonia, New Guinea, Samoa, Tahiti

HOSTS:

Polyphagous; often on Citrus

MYCETASPIS

apicata (Newstead)

Aspidiotus (Chrysomphalus) apicatus Newstead; Pelomphala apicata (Newstead)

DISTRIBUTION:

TX (lower Rio Grande River - Cameron Co)

New World:

Brazil, Guyana, Mexico, Panama

HOSTS:

Acacia, Albizzia, Avicennia nitida, Clusia, Enterolobium cyclocarpum, Inga, Magnolia, Pithecellobium flexicaule

<u>defectopalus</u> <u>Ferris</u> DISTRIBUTION:

FL, TX New World:

Belize, Ecuador, Mexico, Nicaragua, Panama, Peru

HOSTS:

Bumelia tenax, Cercidium floridum, Chlorophora tinctoria, Fagara fagara, Porliera angustifolia, Sideroxylon, Spondias, Swietenia mahogani

personata (Comstock)

Aspidiotus personatus Comstock; Chrysomphalus personatus (Comstock)

DISTRIBUTION:

FL; greenhouse in DC*

New World:

Argentina, Brazil, most Caribbean Islands, Central America, Colombia, Guyana, Mexico, Peru, Venezuela

Europe:

Greenhouse in Belgium, Czechoslovakia, England, France,

Germany, Netherlands

USSR:

Greenhouse

Africa:

Canary Is., Cameroon, Egypt, Guinea, Madeira Is., Ivory

Coast, Senegal, Sierra Leone, South Africa, Togo

Asia:

Philippines, Indonesia, Sri Lanka

Other Areas:

Hawaii

HOSTS:

Polyphagous

sphaerioides (Cockerell) Aspidiotus sphaerioides Cockerell; Chrysomphalus

sphaerioides (Cockerell)

DISTRIBUTION:

LA

New World:

Guatemala, Mexico, Panama

HOSTS:

Bursera, Chamaedorea, Euterpe, Dracaena, Mangifera indica,

palm, Philodendron, Phorium tenax

NELASPIS

crookiae Ferris

DISTRIBUTION:

FL

HOSTS:

Crookia microsepalum

NEOPINNASPIS

harperi McKenzie DISTRIBUTION:

CA, FL, GA

Asia:

Japan, Taiwan Other Areas:

Hawaii

HOSTS:

Polyphagous

NICHOLIELLA

bumeliae Ferris

DISTRIBUTION:

ΑZ

HOSTS:

Bumelia rigida

NILOTASPIS**

halli (Green)** Lepidosaphes (Coccomytilus) halli Green; Coccomytilus halli (Green); Lepidosaphes (Coccomytilus) zlocistii

Bodenheimer

DISTRIBUTION: (CA eradicated)

Europe: Greece Africa: Egypt USSR:

Tadjik SSR, Turkmen SSR, Uzbek SSR

Asia:

Afghanistan, Iran, Iraq, Pakistan, Israel, Syria, Turkey

HOSTS:

Amygdalus, Cerasus, Malus, Prunus, Pyrus, other Rosaceae

NIVEASPIS

ilicis (Hoke)

Lepidosaphes ilicis Hoke; Lyraspis ilicis (Hoke)

DISTRIBUTION: GA, MS, TX

HOSTS:

Forestiera pubescens, Ilex

NUCULASPIS

abietis (Schrank)

<u>Coccus</u> <u>abietus</u> <u>Schrank;</u> <u>Aspidiotus</u> <u>abietis</u> (Schrank); <u>Dynaspidiotus</u> <u>abietis</u> (Schrank)

DISTRIBUTION:

WA Europe USSR Asia:

Iran, Turkey

HOSTS:

Abies, Juniperus, Picea, Pinus

apacheca Ferris DISTRIBUTION:

ΑZ

New World:

Guatemala, Mexico

HOSTS: Pinus

californica (Coleman)

Aspidiotus californicus Coleman; Aspidiotus? pini Comstock; Chrysomphalus californicus (Coleman); Aspidiotus abietis (Schrank)(misidentification)

DISTRIBUTION:

General distribution in conterminous U.S.

New World: Canada, Mexico

HOSTS:

Pinus, Pseudotsuga, Tsuga

pseudomeyeri (Kuwana) <u>Aspidiotus pseudomeyeri</u> Kuwana; <u>Tsugaspidiotus pseudo-</u> meyeri (Kuwana)

DISTRIBUTION:

PA (one collection), NY (two collections on Long Island)

Asia: Japan

HOSTS:

Cedrus, Chamaecyparis, cypress, Juniperus, Thuja, Tsuga

tsugae (Marlatt) <u>Aspidiotus (Diaspidiotus)</u> <u>tsugae</u> Marlatt; <u>Tsugaspidiotus</u> tsugae (Marlatt)

DISTRIBUTION:

CT, NJ, RI

Asia:

Japan, Korea

USSR: Far east

HOSTS:

Juniperus, Picea, Taxus, Tsuga

ODONASPIS

graminis Bremner DISTRIBUTION:

CA

New World: Mexico

HOSTS:

Danthonia californica, grass

litorosa Ferris DISTRIBUTION:

TΧ

New World: Mexico, Panama

HOSTS:

<u>Milium?</u>, <u>Rachidospermum</u> <u>mexicanum</u>, <u>Sporobolus</u> <u>wrightii</u>,

other grasses

minima Howell & Tippins DISTRIBUTION:

GA

HOSTS: Aristida

penicillata Green Anoplaspis penicillata (Green); Dycryptaspis penicillata (Green); Frogattiella penicillata (Green)

DISTRIBUTION:

AL, CA, FL, GA, LA, MS, TX

New World:

Guyana, Jamaica, Puerto Rico

Africa:

Algeria, South Africa

Asia:

China, India, Iran, Japan, Pakistan, Philippines, Sri

Lanka, Taiwan Other Areas:

Fiji, Hawaii, Palau Is.

HOSTS:

Arundinaria, Bambusa, Dendrocalamus, Gigantochloa aspera,

Phyllostachys, other bamboo

ruthae Kotinsky Dycryptaspis ruthae (Kotinsky)

DISTRIBUTION:

AL, AR, AZ, CA, FL, GA, LA, MS, SC, TX

New World:

Argentina, Bermuda, Brazil, Chile, Cuba, Mexico, Puerto Rico, St. Croix

Africa:

Egypt, Ethiopia, Kenya, Madagascar, Mauritius, Reunion, Rhodesia, South Africa

Asia:

Asia: Chagos Arch., Israel, Sri Lanka

Other Areas:

Australia, Christmas Is., Hawaii, New Caledonia

HOSTS:

Poaceae; commonly found on Cynodon dactylon

saccharicaulis (Zehntner)

Aspidiotus sacchari-caulis Zehntner; Aspidiotus secretus v. sacchari-caulis Zehntner; Odonaspis secreta sacchari-caulis (Zehntner)

DISTRIBUTION:

AL, FL, MD

New World:

Cuba, Guatemala+, Honduras+, Puerto Rico, St. Croix,

Venezuela

Africa:

Cameroon, Madeira Is., Mauritius, Sao Tome, South Africa,

Tanzania, Uganda

Asia:

India, Indonesia, Philippines, Thailand+

Other Areas:

New Guinea, Palau Is.

HOSTS: <u>Chloris gayana</u>, <u>Digitaria decumbens</u>, <u>Erianthus arundinaceus</u>, <u>Panicum purpurascens</u>, <u>Pennisetum purpureum</u>, <u>Saccharum officinarum</u>, <u>Sorghum halepense</u>, other grasses

secreta (Cockerell)

<u>Aspidiotus secretus</u> Cockerell: <u>Dycryptaspis secreta</u> (Cockerell)

DISTRIBUTION:

LA, NJ*; greenhouse in NY

Europe:

France; greenhouse in Czechoslovakia

USSR:

Crimea, Black Sea coast of Caucasus

Africa: Algeria Asia:

China, India, Indonesia, Iran, Japan, Pakistan, Sri lanka,

Taiwan

Other Areas:

Bonin Is., Western Samoa

HOSTS:

Arundinaria, Bambusa, Sasa, other bamboo

OPUNTIASPIS

carinata (Cockerell)

Mytilaspis carinatus Cockerell; Lepidosaphes carinatus (Cockerell); Mytilaspis nigra Cockerell

DISTRIBUTION:

FL (Broward Co., Dade Co., Lee Co., Palm Beach Co., St.

Lucie Co.), TX (Hidalgo Co.)

New World:

Belize, Guatemala, Mexico, Peru

HOSTS:

Anthurium, Beaucarnea, Citrus aurantifolia, Dracaena, Nolina, Oncidium, orchid, Pedilanthus, Philodendron,

Theobroma cacao, Tillandsia, Yucca

PALINASPIS

quohogiformis (Merrill)

Targionia quohogiformis Merrill

DISTRIBUTION:

FL

New World:

Cuba, Jamaica, St. Lucia

HOSTS:

Polyphagous

PALLULASPIS

ephedrae

DISTRIBUTION:

CA

Ferris

HOSTS:

Ephedra nevadensis

PARACUPIDASPIS

wilkeyi Howell & Tippins DISTRIBUTION: AZ, CA, KS, NM, OR

HOSTS:

Calocedrus decurrens, Juniperus, J. virginiana

PARLATOREOPSIS

chinensis
 (Marlatt)

Parlatoria chinensis Marlatt

DISTRIBUTION: CA, FL, MO Asia:

China, India, Japan, Philippines, Taiwan

HOSTS: Polyphagous

pyri
 (Marlatt)

Parlatoria pyri Marlatt

DISTRIBUTION:

DC, MD Asia:

China, Japan

HOSTS:

Acer, Cornus, Elaeagnus, Ligustrum, Malus, Osmanthus,

Pyrus

PARLATORIA

blanchardi (Targioni-Tozzetti)** <u>Aonidia blanchardi</u> Targioni-Tozzetti; <u>Parlatoria victrix</u> Cockerell; <u>Parlatoria blanchardii</u> (Targioni-Tozzetti)

DISTRIBUTION:

(AZ*, CA* eradicated)

New World:

Argentina, Brazil, Bolivia

Europe: Italy Africa:

North Africa, Chad, Mali, Mauritius, Niger, Somalia, Sudan

USSR:

Turkmen SSR

ASIA:

Afghanistan, India, Iran, Iraq, Israel, Jordan, Pakistan,

Saudi Arabia, Syria

Other Areas:

Austalia

HOSTS:

Phoenix canariensis, P. dactylifera, Pritchardia filifera,

Hyphaene thebaica

camelliae Comstock

Parlatoria pergandii var. camelliae Comstock

DISTRIBUTION:

AL, CA, FL, DC, DE, GA, LA, MD, MS, NC, OR, SC, TX, VA

New World:

Argentina, Chile, Mexico

Europe:

France, Italy, Portugal, Switzerland

USSR: Abkhazia

Asia:

China, Hong Kong, India, Indonesia, Japan, Korea, Pakistan, Taiwan

HOSTS:

Polyphagous; often on Camellia

<u>Crotonis</u> <u>Douglas</u>

<u>Parlatoria</u> <u>proteus</u> var. <u>crotonis</u> Douglas

DISTRIBUTION:

FL, LA; greenhouse in DC, IL*, MA*, NY*, OH*, PA; (CA

eradicated).
New World:

Antigua, Bahamas, Bermuda, Costa Rica, Cuba, El Salvador, Grand Cayman Is., Guadeloupe, Guyana, Honduras, Haiti,

Jamaica, Mexico, Nicaragua, Panama, Puerto Rico, St.

Croix, St. Lucia

Europe:

Greenhouse in England, France

Africa:

Cameroon, Egypt, Guinea, Madagascar, South Africa

Asia:

India, Philippines, Taiwan?

Other Areas:

Cook Is., Fiji, Hawaii, Kwajalein Is., New Caledonia, Palau Is., Tahiti, Truk Is., Western Samoa

HOSTS: Codiaeum

Oleae (Colvee)

<u>Diaspis oleae Colvee; Parlatoria calianthina</u> Berlese & Leonardi; Syngenaspis oleae (Colvee)

DISTRIBUTION:

AZ, CA, DE, MD

New World:

Argentina, Brazil, Bolivia, Grand Cayman Is., Mexico

Europe:

Bulgaria, France, Greece, Italy, Malta, Portugal, Spain,

Yugoslavia

Africa:

North Africa, Canary Is., Sudan

USSR:

Armenia, Azerbaijan, Crimea, Dugestan, Georgia, Kazakh SSR, Krasnodar region, Tadzhik SSR, Turkmen SSR, Uzbek SSR

Asia:

Afghanistan, Cyprus, India, Iran, Iraq, Israel, Jordan,

Lebanon, Pakistan, Saudi Arabia, Syria, Turkey

Other Areas: Australia

HOSTS:

Olea and many other hosts

pergandii Comstock

<u>Parlatoria pergandei</u> Comstock

DISTRIBUTION:

AL, CA, CT*, DC*, FL, GA, IL*, KS, LA, MD, MO*, MS, NY, OK, PA, SC, TX, VA*; greenhouse in colder areas. Widely distributed throughout the tropical and subtropical areas of the world

HOSTS:

Polyphagous; common on <u>Citrus</u>

pittospori Maskell

<u>Parlatoria</u> <u>myrtus Maskell; Parlatoria</u> <u>dryandrae</u> Fuller; <u>Parlatoria</u> <u>petrophilae</u> Fuller DISTRIBUTION:

CA

Africa:

South Africa

Other Areas:

Australia, New Zealand

HOSTS:

Polyphagous

(Curtis)

Aspidiotus proteus Curtis; Parlatoria orbicularis Targioni -Tozzetti; Syngenaspis proteus (Curtis)

DISTRIBUTION:

DC, FL, IL*, KS*, LA, MA*, MD, MO*, MS*, NJ, NY, PA, TN, TX; (CA under eradication program); greenhouse in colder

areas

New World:

Bahamas, Brazil, many Caribbean Islands, Central America,

Colombia, Ecuador, Mexico, Paraguay, Peru, Surinam,

Venezuela

Europe:

Greenhouse in Belgium, Bulgaria, Czechoslovakia, England,

Denmark, France, Germany, Italy, Monaco, Spain

USSR:

Greenhouse

Africa:

Egypt, Mauritius, South Africa, Tanzania

Asia:

Iran, Pakistan eastward through Indonesia and north to

Japan and Korea

Other Areas:

Australia, Bonin Is., Caroline Is., Fiji, Guam, Hawaii,

New Guinea

HOSTS:

Polyphagous; common on Orchidaceae

theae Cockerell

DISTRIBUTION:

DC, GA, MD, MS, NC, TX, VA; (CA eradicated)

Asia:

China, Iran, Japan, Korea, Taiwan

Europe:

Greenhouse in England

USSR:

Black Sea coast, Caucasus

HOSTS: Polyphagous

vandae McKenzie** DISTRIBUTION: (CA eradicated) New World: Jamaica, Panama Other Areas: Guam, Hawaii

HOSTS:

Vanda, other orchid plants

PELLICULASPIS

celtis McDaniel DISTRIBUTION:

ΤX

HOSTS:

Celtis spinosa var. pallida

PINNASPIS

aspidistrae (Signoret)

<u>Chionaspis aspidistrae</u> Signoret; <u>Hemichionaspis</u> <u>aspidistrae</u> (Signoret); <u>Pinnaspis ophiopogonis</u> Takahashi; <u>Pinnaspis caricis Ferris</u>

DISTRIBUTION:

AL, AR, CA, CT, DC, FL, GA, IA, IL, IN, KS, KY, LA, MA, MD, MI, MO, MS, NC, NJ, NY, OH, OK, OR, PA, SC, TN, TX, UT, VA; greenhouse in northern states. Widely distributed in the tropical and subtropical areas of the world; greenhouse in temperate regions

HOSTS:

Polyphagous; common on <u>Aspidistra</u>, ferns, <u>Liriope</u>, Ophiopogon

buxi (Bouche) Aspidiotus <u>buxi</u> Bouche; <u>Mytilaspis buxi</u> (Bouche); <u>Mytilaspis? pandani</u> Comstock; <u>Pinnaspis pandani</u> (Comstock); <u>Pinnaspis siphonodontis</u> Cockerell & Robinson

DISTRIBUTION:

FL; greenhouse in DC*, IL*, MA*, NY*, PA*

New World:

Argentina, Brazil, many Caribbean Islands, most Central

American countries, Colombia, Ecuador, Guyana, Mexico, Peru, Surinam, Venezuela

Europe:

Italy; greenhouse

USSR:

Greenhouse

Africa:

Cameroon, Egypt, Ghana, Madagascar, Mauritius, Reunion, Sao Tome, Seychelles, Sierra Leone, Tanzania, Togo, Zaire

China, Hong Kong, India, Indonesia, Japan, Korea, Malaya, Pakistan, Philippines, Singapore, Sri Lanka, Taiwan, Thailand

Other Areas:

Australia, Bonin Is., Fiji, Guam, Hawaii, Kusaie, New Guinea, Palau Is., Ponape, Solomon Is., Tahiti, Truk Is.

HOSTS:

Polyphagous

strachani (Cooley)

Hemichionaspis minor var. strachani Cooley; Hemichionaspis marchali Cockerell; Hemichionaspis townsendi Cockerell; Pinnaspis marchali (Cockerell); Pinnaspis gossypii (Newstead); Pinnaspis minor of authors; Pinnaspis temporaria Ferris

DISTRIBUTION:

AL, FL, GA, LA, MS, TX, probably in other states; (CA eradicated)

New World:

Widespread south of U.S. border; Bermuda

Europe:

Greenhouse in Germany, Great Britain, Poland

USSR:

Greenhouse

Africa:

Cameroon, Cape Verde, Dahomey, Gambia, Ghana, Guinea, Ivory Coast, Kenya, Madagascar, Mauritania, Mauritius, Mozambique, Nigeria, Principe, Reunion, Rodrigues, Sao Tome, Senegal, Seychelles, Tanzania, Togo, Zaire

Asia:

Chagos Arch., China, Hong Kong, India, Indonesia, Japan, Korea, Malaysia, Nepal, Okinawa, Pakistan, Philippines, Saudi Arabia, Singapore, Sri Lanka, Taiwan, Thailand, Vietnam

Other Areas:

Australia, Caroline Is., Canton Is., Christmas Is., Cook Is., Ellice Is., Fiji, Gilbert Is., Hawaii, Marshall Is.,

Mariana Is., New Caledonia, New Guinea, Niue, New Zealand, Ocean Is., Palau Is., Samoa, Tonga, Tokelau, Tahiti, Yap Is.

HOSTS:

Polyphagous

POLIASPIS

cycadis Comstock** Poliaspis gaultheriae Green

DISTRIBUTION:

DC* in greenhouse

Europe:

England in greenhouse

Asia: India

HOSTS:

Cycas, Dioon edule, Microzamia

PRAECOCASPIS

diversa Ferris

DISTRIBUTION:

FL

HOSTS: Trema

PROTODIASPIS

agrifoliae Essig

DISTRIBUTION:

CA

New World: Mexico

HOSTS:

Quercus, Q. agrifolia

didymus McKenzie & Nelson-Rees DISTRIBUTION:

ΑZ

HOSTS:

Quercus grisea, Q. turbinella

emoryi Ferris DISTRIBUTION:

ΤX

HOSTS:

Quercus emoryi

<u>lobata</u> <u>Ferris</u> Obluctaspis lobata (Ferris)

DISTRIBUTION: CO, NM, TX

HOSTS:

Quercus gambeli, Q. grisea

pulchra Ferris DISTRIBUTION:

ΑZ

New World: Mexico

HOSTS:

Quercus, Q. toumeyi

varus Hoke DISTRIBUTION:

AR, MS, TN, TX New World:

Mexico

HOSTS:

Quercus, Q. hypoleuca, Q. laurifolia

PSEUDAONIDIA

duplex (Cockerell)

Aspidiotus duplex Cockerell; <u>Pseudaonidia rhododendri</u> (Green); <u>Aspidiotus theae</u> Maskell; <u>Pseudaonidia theae</u>

(Maskell)

DISTRIBUTION:

AL, FL, GA, LA, MS, TX, VA

Asia:

China, India, Japan, Korea, Sri Lanka, Taiwan

USSR: Abkhazia, W. Gruzia

HOSTS:

Polyphagous

paeoniae (Cockerell)

Aspidiotus duplex var. paeoniae Cockerell; Pseudaonidiella paeoniae (Cockerell)

DISTRIBUTION:

AL, AR, DC, DE, FL, GA, LA, MD, MO, MS, NC, NJ, NY, PA,

SC, TX, VA

Asia:

China, Japan

Europe:

Italy

USSR:

Georgia

HOSTS:

Azalea, Camellia, Ilex, Myrica, Rhododendron, Thea, other

hosts

trilobitiformis (Green)

Aspidiotus trilobitiformis Green

DISTRIBUTION:

FL (Dade Co.)

New World:

Argentina, Bahamas, Bolivia, Brazil, Caribbean Islands, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Guyana, Mexico, Panama, Peru, Surinam, Uruguay, Venezuela

Africa:

Angola, Benin, Cameroon, Chad, Egypt, Guinea, Ivory Coast, Kenya, Liberia, Madagascar, Malawi, Mauritius, Mozambique, Nigeria, Principe, Reunion, Rodrigues, Sao Tome, Senegal, Sierra Leone, Somalia, South Africa, Tanzania, Togo,

Uganda, Zaire, Zanzibar

USSR:

Abkhazia in greenhouse

Asia:

Pakistan east through Indonesia north into China and Japan

Other Areas:

Australia, Fiji+, New Caledonia, Tahiti+

HOSTS:

Polyphagous; often on Annona, Citrus, Ficus, Ixora,

Mangifera indica, Nerium

PSEUDAULACASPIS

cockerelli (Cooley)

Chionaspis cockerelli Cooley; Chionaspis dilatata Green; Phenacaspis dilatata (Green); Phenacaspis natalensis Cockerell; Chionaspis aucubae Cooley; Phenacaspis aucubae (Cooley); Phenacaspis sandwicensis Fullaway; Chionaspis syringae Borchsenius; Pseudaulacaspis biformis Takagi; Phenacaspis ferrisi Mamet; Phenacaspis cockerelli (Cooley)

DISTRIBUTION:

AL, FL, GA, LA, MO, SC, TN, TX; greenhouse in MD, OR, PA, VA; (CA eradicated)

New World:

Guatemala+, St. Thomas+

Africa:

Egypt, Kenya, Madagascar, Mauritius, Mozambique, Reunion, Rhodesia, Rodrigues, Seychelles, South Africa, Zanzibar

Bangladash, Cambodia, China, Hong Kong, India, Indonesia, Japan, Korea, Malaya, Philippines, Singapore, Sri Lanka,

Taiwan, Thailand, Vietnam

USSR:

Far east

Other Areas:

Australia, Bonin Is., Hawaii, Solomon Is.

HOSTS:

Polyphagous

major (Cockerell)

Chionaspis major Cockerell; Aulacaspis flacourtiae Rutherford; Pseudaulacaspis flacourtiae (Rutherford); Aulacaspis major (Cockerell); Diaspis major (Cockerell)

DISTRIBUTION:

FL

New World:

Antigua, Colombia, Costa Rica, Cuba, Dominican Republic, Galapagos Is., Guatemala, Honduras, Puerto Rico, Trinidad, Venezuela

Africa:

Madagascar, Mauritius, Seychelles, Zanzibar

China, Indonesia (Java), Sri Lanka, Taiwan

Other Areas:

Hawaii

HOSTS:

Polyphagous

pentagona (Targioni-Tozzetti) <u>Diaspis pentagona</u> Targioni-Tozzetti; <u>Diaspis amygdali</u> Tryson; <u>Diaspis lanatus</u> Morgan & Cockerell; <u>Chionaspis prunicola Maskell; Aulacaspis pentagona</u> (Targioni); <u>Sasakiaspis pentagona</u> (Targioni)

DISTRIBUTION:

AL, CT, DC, DE, FL, GA, IN, LA, MA, MD, MO, MS, NC, NJ, NY, OH, OR, PA, RI, SC, TN, TX, VA, WV: (CA eradicated)
New World:

Caribbean Islands, most countries in South America, Bahamas, Bermuda, Costa Rica, Honduras, Panama

Europe:

Bulgaria, England, France, Germany, Greece, Hungary, Italy, Malta, Switzerland, Yugoslavia

Africa:

Egypt, Ghana, Madagascar, Madeira Is., Malawi, Mauritius, Principe, Reunion, Rhodesia, Sao Tome, Seychelles, South Africa, St. Helena, Tanzania, Zanzibar USSR:

Transcaucasus, Abkhazia, Adjaria, Sakhalin, Ukraine Asia:

China, Hong Kong, India, Indonesia, Iran, Israel, Japan, Korea, Malaya, Sri Lanka, Syria, Taiwan, Turkey, Vietnam

Other Areas:

Australia, Bonin Is., Fiji, Guam, New Caledonia, New Guinea, New Hebrides, New Zealand, Palau Is., Ponape, Saipan, Solomon Is., Tonga, Truk Is.

HOSTS: Polyphagous

PSEUDISCHNASPIS

bowreyi (Cockerell)

Aspidiotus bowreyi Cockerell; Chrysomphalus bowreyi (Cockerell); Pseudischnaspis linearis Hempel

DISTRIBUTION:

FL; greenhouse in MO*, NY*

New World:

Argentina, Barbados, Bermuda, Bolivia, Brazil, Central America, Colombia, Cuba, Dominican Republic, Ecuador, Jamaica, Mexico, Peru, Puerto Rico, St. Thomas, Trinidad, Venezuela

HOSTS:

Polyphagous; often on bromeliads, <u>Agave</u>

PSEUDODIASPIS

larreae (Cockerell)

Aspidiotus (Pseudodiaspis) larreae Cockerell

DISTRIBUTION:

ΑZ

HOSTS:

Larrea tridentata

PSEUDOPARLATORIA

ostreata Cockerell DISTRIBUTION:

FL

New World:

Central America, Cuba, Dominican Republic, Ecuador, Guadeloupe, Guyana, Haiti, Jamaica, Mexico, Puerto Rico,

St. Croix, Venezuela

Europe:

Greenhouse in France, Germany

Africa:

Cameroon, Guinea, Nigeria, Senegal, Sierra Leone

HOSTS:

Polyphagous 1 and 1 and

parlatorioides
 (Comstock)

<u>Aspidiotus? parlatorioides</u> Comstock; <u>Pseudoparlatoria</u> pusilla Green

DISTRIBUTION:

AL, FL, GA, MD, NJ, TX; (CA eradicated); greenhouse in

colder areas New World:

Many countries and islands south of U.S. border, Bermuda

Europe:

Spain; greenhouse in Belgium, Czechoslovakia, England,

France, Germany, Italy, Netherlands, Sweden

USSR:

Greenhouse

Asia:

Sri Lanka

Other Areas:

Hawaii, New Zealand

HOSTS:

Polyphagous 1

tillandsiae Tippins DISTRIBUTION:

FL

HOSTS:

Tillandsia usneoides

QUADRASPIDIOTUS

braunschvigi (Rungs) ** Aspidiotus braunschvigi Rungs; Aspidaspis braunschvigi

(Rungs)

DISTRIBUTION:

CA*
Africa:
Morocco

HOSTS:

Ficus, Pistacia

forbesi (Johnson)

Aspidiotus forbesi Johnson; Forbesaspis forbesi (Johnson)

DISTRIBUTION:

General distribution in conterminous U.S.

New World: Canada, Mexico Africa: South Africa

HOSTS: Polyphagous

gigas (Thiem & Gerneck) Aspidiotus (Euraspidiotus) gigas Thiem & Gerneck;

Diaspidiotus gigas (Thiem & Gerneck); Aspidiotus multiglandulatus Borchsenius; Quadraspidiotus ostreaeformis
(Curtis) of Ferris

DISTRIBUTION:

ID, MT, NY, OH, OR, PA, RI*, UT, WA, WI*, WY

New World:

Canada (New Brunswick, Nova Scotia, Ontario)

Europe:

Bulgaria, Czechoslovakia, France, Germany, Hungary, Italy,

Netherlands, Poland, Spain, Switzerland

USSR Africa: Algeria Asia:

Turkey

HOSTS: Populus, Salix

juglansregiae (Comstock)

Aspidiotus juglans-regiae Comstock; Aspidiotus fernaldi Cockerell; Quadraspidiotus fernaldi (Cockerell): Aspidiotus glanduliferus Cockerell; Quadraspidiotus glanduliferus (Cockerell)

DISTRIBUTION:

General distribution in conterminous U.S.

New World: Canada, Mexico

HOSTS: Polyphagous 1

ostreaeformis (Curtis)

Aspidiotus ostreaeformis Curtis; Diaspidiotus ostreaeformis (Curtis); Aspidiotus betulae Baerensprung; Diaspidiotus hunteri (Newell)

DISTRIBUTION:

CO, CT, IA, ID, KS, MA, ME, MI, MN, MT, NH, NY, OH, OR,

PA, RI, SD, UT, WA, WI, WY New World:

Argentina, Canada

Europe **USSR**

Asia:

China, India, Iran, Iraq, Japan, Korea, Nepal, Pakistan,

Turkey

Other Areas:

Australia, New Zealand

HOSTS:

Polyphagous; common on Malus, Rosaceae

perniciosus (Comstock)

<u>Aspidiotus perniciosus</u> Comstock; <u>Comstockiaspis</u> perniciosus(Comstock); Diaspidiotus perniciosus (Comstock)

DISTRIBUTION:

General distribution in conterminous U.S.

New World:

Argentina, Bolivia, Brazil, Canada, Chile, Cuba, Mexico,

Paraguay, Peru, Uruguay, Venezuela

Europe:

Austria, Bulgaria, Czechoslovakia, France, Germany,

Greece, Hungary, Italy, Poland, Portugal, Romania, Spain, Switzerland, Yugoslavia

USSR:

Africa:

Algeria, Angola, Canary Is., Rhodesia, South Africa, Zaire

Asia:

China, India, Iran, Iraq, Japan, Korea, Nepal, Pakistan,

Turkey

Other Areas:

Australia, New Zealand

HOSTS:

Polyphagous; common on Malus, Prunus, Rosaceae

socialis (Hoke)

Aspidiotus socialis Hoke

DISTRIBUTION: GA, MS, TX

HOSTS: Quercus

taxodii Ferris DISTRIBUTION:

DC, FL, GA, LA, MD, PA, TX

HOSTS:

Taxodium distichum

tillandsiae Takagi & Tippins DISTRIBUTION:

GA

HOSTS:

Tillandsia usneoides

QUERNASPIS

insularis Howell

DISTRIBUTION:

FL, GA

HOSTS:

Quercus laurifolia, Q. stellata, Q. virginiana

quercicola Tippins & Beshear

DISTRIBUTION:

GA

HOSTS:

Quercus laurifolia

quercus (Comstock)

Chionaspis quercus Comstock

DISTRIBUTION:

AZ, CA, FL, GA, LA, NM, OH, TX, WA

New World: Mexico

HOSTS: Quercus

RADIONASPIS

indica (Marlatt)

<u>Leucaspis indica</u> Marlatt; <u>Suturaspis indica</u> (Marlatt); Radiaspis indica (Marlatt)

DISTRIBUTION:

FL

New World:

Cuba, Dominican Republic, Jamaica, Panama, Puerto Rico,

Tortola Africa: Senegal+ Asia:

India, Indonesia (Java)

Other Areas:

Hawaii

HOSTS:

Mangifera indica

RHIZASPIDIOTUS

dearnessi (Cockerell)

Aspidiotus dearnessi Cockerell; Aspidiotus (Targionia) helianthi Parrott; Aspidiotus (Targionia) gutierreziae Cockerell & Parrott; Targionia dearnessi (Cockerell); Targionia helianthi (Parrott); Targionia gutierreziae (Cockerell & Parrott); Remotaspidiotus dearnessi (Cockerell)

DISTRIBUTION:

AL, AZ, CA, CO, FL, GA, IN, KS, MA, MD, MO, NC, NE, NJ,

NM, NY, OK, SC, TX, UT, VA, WI

New World:

Canada, Cuba, Mexico

HOSTS:

Polyphagous

RUGASPIDIOTUS

arizonicus (Cockerell)

Diaspis arizonicus Cockerell

DISTRIBUTION:

AZ, CA New World: Mexico

HOSTS: Lysiloma

nebulosus Ferris DISTRIBUTION:

AZ, CA

HOSTS:

Eriogonum fasciculatum

sculpturatus Ferris DISTRIBUTION:

ΑZ

HOSTS:

Encelia farinosa, Franseria dumosa

SELENASPIDUS

<u>albus</u> McKenzie DISTRIBUTION:

CA

Africa:

Eritrea, South Africa, S. W. Africa

Europe: Netherlands+

HOSTS: Euphorbia articulatus (Morgan)

Aspidiotus articulatus Morgan; <u>Pseudaonidia articulatus</u> (Morgan)

DISTRIBUTION:

FL; (CA eradicated)

New World:

Widespread south of U.S. border; Bermuda

Africa:

Angola, Benin, Cameroon, Chad, Ethiopia, Ghana, Guinea, Ivory Coast, Kenya, Madagascar, Mauritius, Morocco+, Mozambique, Principe, Reunion, Rhodesia, Sao Tome, Sierra Leone, Somalia, South Africa, Tanzania, Togo, Uganda,

Zaire Asia:

Philippines Other Areas: Fiji, Guam+

HOSTS:

Polyphagous; often on Citrus and palms

rubidus McKenzie DISTRIBUTION:

CA (not collected since 1948), TX?

Europe: Germany Africa: South Africa

Asia:

China, Singapore

HOSTS: Euphorbia

SITULASPIS

atriplicis (Ferris)

Pseudodiaspis atriplicis Ferris

DISTRIBUTION:

AZ, CA

HOSTS: Atriplex

condaliae (Ferris)

<u>Pseudodiaspis</u> <u>condaliae</u> Ferris

DISTRIBUTION:

CA

HOSTS:

Condalia, C. spathulata

<u>daleae</u> Ferris DISTRIBUTION:

CA

HOSTS: Dalea

yuccae (Cockerell) Aspidiotus yuccae Cockerell; Pseudodiaspis yuccae (Cockerell); Targionia yuccae (Cockerell); Neosignoretia yuccae (Cockerell); Xerophilaspis parkinsoniae Ferris; Pseudodiaspis parkinsoniae (Ferris); Aspidiotus yuccae varaneomexicana Cockerell & Parrott; Diaspis celtidis

Cockerel1

DISTRIBUTION:

AZ, CA, FL, NM, OK, TX

New World: Mexico

HOSTS:

Polyphagous; often on Yucca

STRAMENASPIS

kelloggi (Coleman) <u>Leucaspis kelloggi Coleman; Lepidosaphes kelloggi (Coleman); Dinaspis kelloggi (Coleman)</u>

DISTRIBUTION:

AZ, CA, NM, TX, WA

New World: Mexico

HOSTS:

Abies, Libocedrus, Pinus, Pseudotsuga, Tsuga

TARGIONIA

bigeloviae (Cockerell)

Aspidiotus (Hemiberlesia) bigeloviae Cockerell; Hemiberlesia bigeloviae(Cockerell); Targaspidiotus bigeloviae (Cockerell) DISTRIBUTION:

CA, TX

New World:

Mexico

HOSTS:

Asteraceae, Eriogonum fasciculatum, Gutierrezia, Haplopap-

pus propinquus, Lepidospartum californicum

yuccarum (Cockerell) Aspidiotus yuccarum Cockerell; Hemiberlesia yuccarum (Cockerell); Targaspidiotus yuccarum (Cockerell)

DISTRIBUTION:

AZ, NM, TX

New World:

Mexico

HOSTS:

Polyphagous

UNASPIS

citri (Comstock) <u>Chionaspis</u> <u>citri</u> Comstock; <u>Prontaspis</u> <u>citri</u> (Comstock)

DISTRIBUTION:

FL, LA

New World:

Widespread south of U.S. border; Bermuda

Europe:

Azores, Greece+, Portugal, Spain+

Africa:

Benin, Cameroon, Guinea, Ivory Coast, Liberia, Madagascar,

Mali, Mauritius, Nigeria, Senegal, Sierra Leone, South

Africa?, Togo, Zaire

Asia:

China, Hong Kong, Indochina, Indonesia, Malaysia, Philip-

pines+, Singapore, Thailand+

Other Areas:

Australia, Cook Is., Fiji, New Caledonia, New Guinea, New

Hebrides, New Zealand, Ponape, Solomon Is., Tonga, Truk

Is., Wallis Is., Western Samoa

HOSTS:

Citrus, Severina

euonymi (Comstock)

Chionaspis euonymi Comstock

DISTRIBUTION:

AL, AR, CA, CT, DC, DE, FL, GA, IL, IN, KY, LA, MA, MD, MI, MO, MS, NC, NE, NH, NJ, NM, NY, OH, OK, PA, RI, SC,

TN, TX, VA, WI, WV

New World:

Argentina, Canada (British Columbia), Mexico

Europe:

Austria, Bulgaria, England, France, Greece, Hungary,

Italy, Malta, Spain, Switzerland, Yugoslavia

USSR:

Armenia, Azerbaijan, Crimea, Georgia, Krasnodar, Ukraine,

Uzbek SSR Africa:

Algeria, Morocco

Asia:

China, Hong Kong, Israel, Japan, Korea, Turkey

HOSTS:

Celastrus, Euonymus, Ilex, Pachysandra

VELATASPIS

anasterias Ferris DISTRIBUTION:

ΤX

New World:

Mexico, Nicaragua, Panama

HOSTS:

Acacia constricta, A. vernicosa, Mimosa

dentata (Hoke) Scobinaspis dentata Hoke; Lepidosaphes dentata (Hoke)

DISTRIBUTION:

AL, FL, GA, LA, MS, TN, TX

New World:

Panama

HOSTS:

Polyphagous

mimosarum (Cockerell)

Mytilaspis mimosarum Cockerell; Lepidosaphes mimosarum

(Cockerell); Lepidosaphes chilopsidis Marlatt

DISTRIBUTION:

ΤX

New World:

Guatemala, Mexico

HOSTS:

Acacia, Carya illinoiensis, Castela nicholsoni, Cercidium

floridum, Mimosa, Pithecellobium, Prosopis, Psidium,

Strombocarpa cinerescens

XEROPHILASPIS

prosopidis Cockerell DISTRIBUTION: AZ, CA, TX

New World: Mexico

HOSTS:

Prosopis, P. chilensis, P. velutina

ADDENDUM

CIRCULASPIS

fistulella Ferris DISTRIBUTION:

FL, GA, TX

HOSTS:

<u>Distichilis</u>, <u>D. spicata</u>, <u>Sporolobus</u>

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TWO LETTER ABBREVIATIONS OF STATES

ALABAMA	AL	MONTANA	MT
ALASKA	AK	NEBRASKA	NE
ARIZONA	AZ	NEVADA	NV
CALIFORNIA	CA	NEW HAMPSHIRE	NH
COLORADO	CO	NEW JERSEY	NJ
CONNECTICUT	СТ	NEW MEXICO	NM
DELAWARE	DE	NEW YORK	NY
DIST. OF COLUMBIA	DC	NORTH CAROLINA	NC
FLORIDA	FL	NORTH DAKOTA	ND
GEORGIA	GA	OHIO	ОН
HAWAII	HI	OKLAHOMA	0K
IDAH0	ID	OREGON	OR
ILLINOIS	IL	PENNSYLVANIA	PA
INDIANA	IN	RHODE ISLAND	RI
IOWA	IA	SOUTH CAROLINA	SC
KANSAS	KS	SOUTH DAKOTA	SD
KENTUCKY	KY	TENNESSEE	TN
LOUISIANA	LA	TEXAS	TX
MAINE	ME	UTAH	UT
MARYLAND	MD	VERMONT	VT
MASSACHUSETTS	MA	VIRGINIA	۷A
MICHIGAN	MI	WASHINGTON	WA
MINNESOTA	MN	WEST VIRGINIA	WV
MISSISSIPPI	MS	WISCONSIN	WI
MISSOURI	MO	WYOMING	WY

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